

ABSTRACT

Title of Thesis: OPPOSITIONS: A UNITED NATIONS CONSENSUS BUILDING

Jimena Amaral Campos, Master of Architecture, 2011

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Opposition works as the framework for this thesis investigation of ideas of conflict and negotiation viewed through the lens of collage.

Although the mission of the UN Consensus building is to arrive to a resolution of conflict, the exploration focuses more on the idea that when in conflict people are often in opposition but they are willing to sit and negotiate because they share one collective identity, the “UN identity”. As a result, the research focuses on conflict negotiation and the architecturalization of negotiated opposing conditions. Collage, as a visual and conceptual artifact of oppositional conditions, works as the foundation for this exploration where techniques of juxtaposition, layering and simultaneity, are used to challenge ideas of connection and separation; architectural concepts found nested in the culture, site and program of the building. Oppositions between cultures, political identities, program pieces, circulation patterns and perspectives are collaged together to reflect the United Nations mission, agenda and values.

OPPOSITIONS:
A UNITED NATIONS CONSENSUS BUILDING

By

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Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park in partial fulfillment
of the requirements for the degree of
Master of Architecture
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Garth Rockcastle
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OPPOSITIONS

A United Nations Conflict Resolution Building

Figure 1 :Thesis title and conceptual image.

On Oppositions

Seen in all three ideas of conflict, negotiation and collage; oppositions work as the overarching way to think about this thesis. Central to its understanding is that, although using the word oppositions, its meaning does not denote opposites. Negotiations are not necessarily opposite; we can have scenarios like the Palestinian and Israeli conflict that are non symmetrical and the goals are not the same or scenarios like the one in Libya where the world wants peace and Muammar Gaddafi wants to return to order. Similarly, when in conflict, people are often in opposition, and although they might view things in different ways they share at least one collective identity, the United Nations Identity. Finally, opposition is part of the essence of collage. Collage, in big part, bases its entire visual aesthetic around the juxtaposition of elements, which in turn can be understood as the interplay of oppositional conditions which is ultimately what this thesis research is based on.

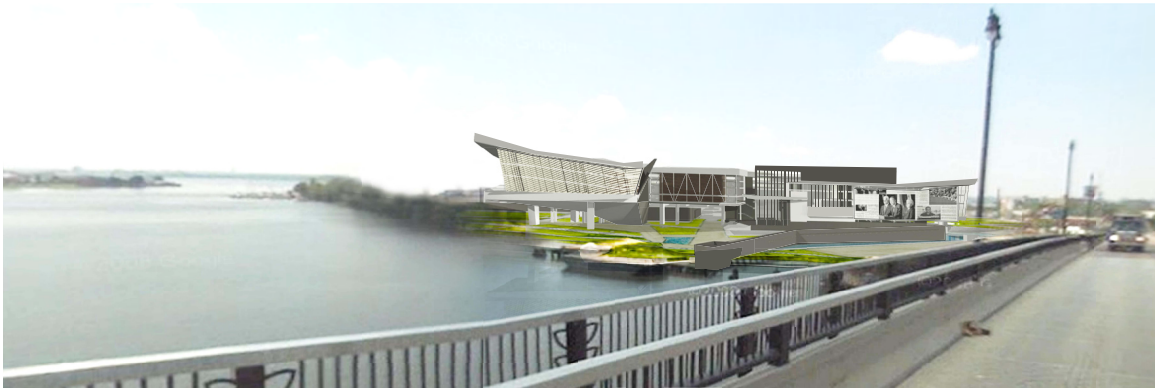


Figure 2 : Perspective view from Frederick Douglass Memorial Bridge/ South Capitol Street SW



Figure 3 : Perspective from exterior podium where Prime Minister of Israel, Yitzhak Rabin, and the PLO leader, Yasser Arafat shake hands and announce the conclusion of the Middle East Peace negotiations.

Chapter 1: Conceptual agenda

Collage

“A collage technique, by accommodating a whole arrange of axis mundi, might be a means of permitting us the enjoyment of utopian poetics without our being obliged to suffer the embarrassment of utopian politics. Which is to say that, because collage is a method deriving its virtue from its irony, because it seems to be a technique for using things and simultaneously disbelieving in them, it is also a strategy which can allow utopia to be dealt with as image, to be dealt with in fragments without our having to accept it in toto, which is further to suggest that collage could even be a strategy which, by supporting the utopian illusion of changelessness and finality, might even fuel a reality of change, motion, action and history.”¹

Colin Rowe
Collage city

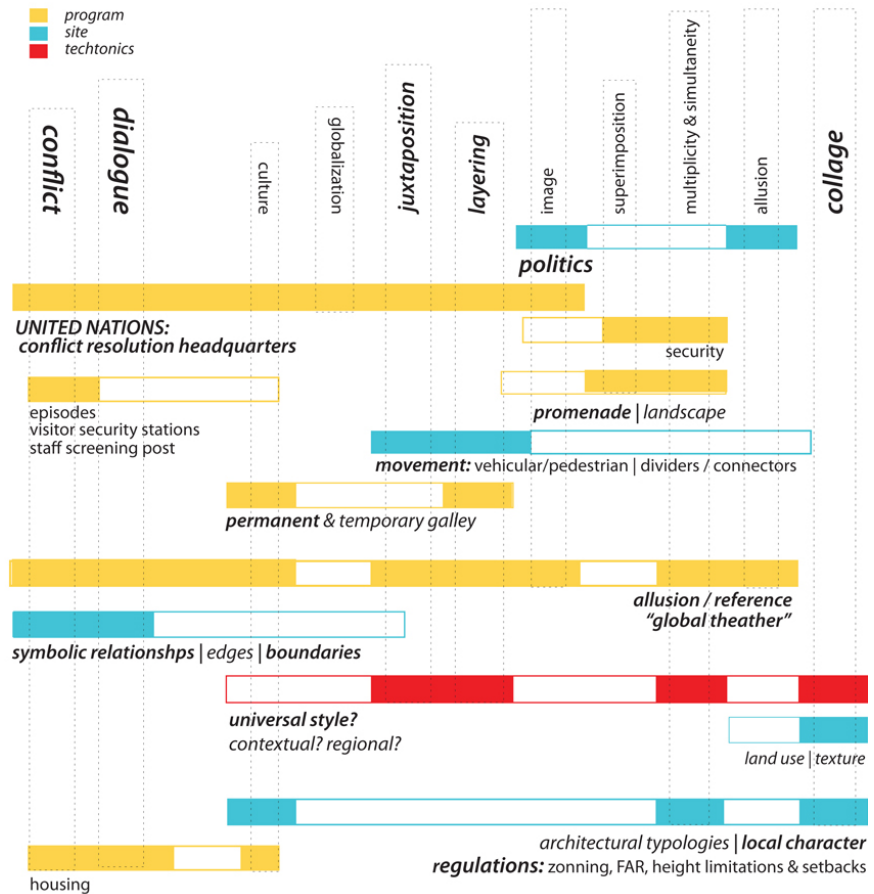


Figure 4 : early analysis of potential connections and overlaps between collage, program, site and techtonics.

Within this thesis and the content of this document it is important to understand the different approaches to the use of the word collage; specially the idea that collage is not only being use as a representational technique for exploring and representing ideas, but also as a way of thinking; a state of mind where the principles of collage manifest physically and metaphorically to connect and challenge the different aspects of this research.

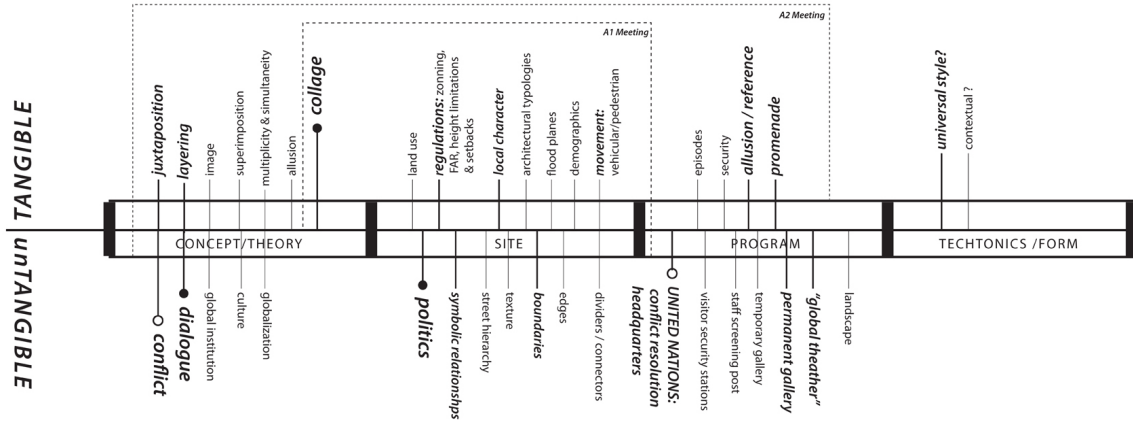


Figure 5 : early mapping of conceptual ideas

State of Mind

This thesis is the investigation of ideas of conflict and negotiation viewed through the lens of collage. Present in these ideas is opposition, which consequently works as the overarching way to think and frame the previously mentioned concepts.

Therefore, the statement of collage as a state of mind refers to an intellectualization of collage and its principles and a reflection of personal beliefs and ideals concerning oppositions.

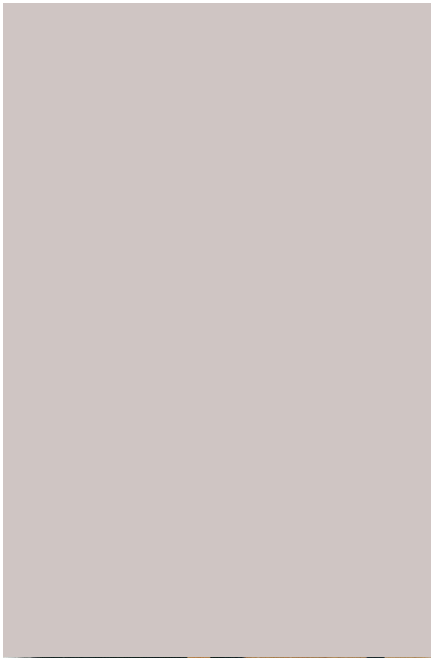


Figure 6 : Juan Gris_Glasses,
Newspaper and Bottle of Wine,
1913

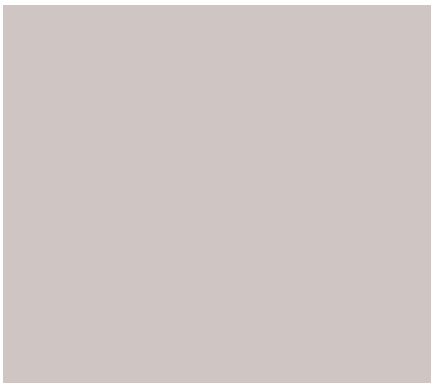


Figure 7 : Gino Severini_ Still Life
with "Lacerba," 1913

Technique

Collage started in the early 1900's during the cubist movement where Braque and Picasso pasted for the first time a scrap of paper onto the surface of a painting marking a major, if not 'the major' turning point in the evolution of Modern art. What began as cut and paste paper in the Cubist years turned to be the framework for a series of movements of the 20th century such as Dadaism, surrealism and international constructivism. By the 1930's it had "already proliferated into an army of techniques for interrogating the image, the surface and the process of art."² The Dadas took "the techniques of relief assemblage, over-painting and photo-collage to launch surrealism as painting and to blow apart any simple definition of 'collage' as having to do exclusively with paper and glue."³ For these artists the political platform based on social revolution and the overthrow of social democracy and the old bourgeois of 1918 worked as inspiration to give collage its first political orientation.

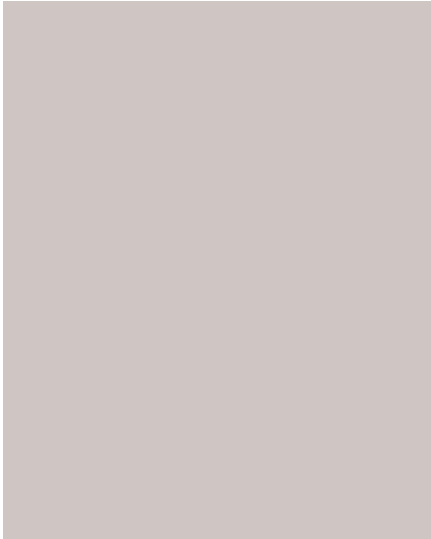


Figure 8 : Pablo Picasso_ Pipe, Wineglass and Bottle of Vieux Marc (Still Life – Lacerba), 1914

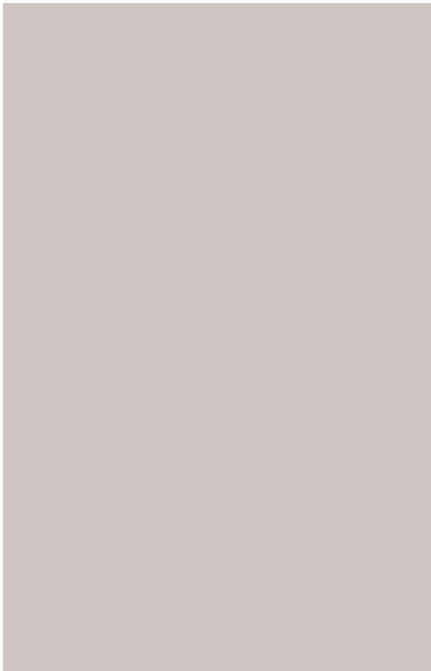


Figure 9 : Georges Braque_ Still Life (Mandolin), 1914

Of significance here was the ability of found material to generate metaphor.⁴

Photomontage, in particular, with its opposing structures and dimensions such as rough versus smooth, aerial views versus close-ups and perspective versus flat plane allowed the balance of “the most violent oppositions”.⁵

Oppositions will become one of the most distinguishing features of collage and like Taylor, Colin Rowe recognizes that “collage technique, by intention, if not by definition, insists upon the centrality of just such a balancing act”;⁶ an act that through juxtaposition of images and ideas highlights tension while creating dialogue among two very distinct views.

Circulating within these system of opposites are arbitrary signs that, like language, form the structure of collages.⁷ A hierarchy of elements forms this structure where the primary elements will work as signs moving down to the tertiary elements where their look and position can change without altering the reading of the whole.

With signs comes memory, which allows for two other characteristics of collage: multiplicity and simultaneity.

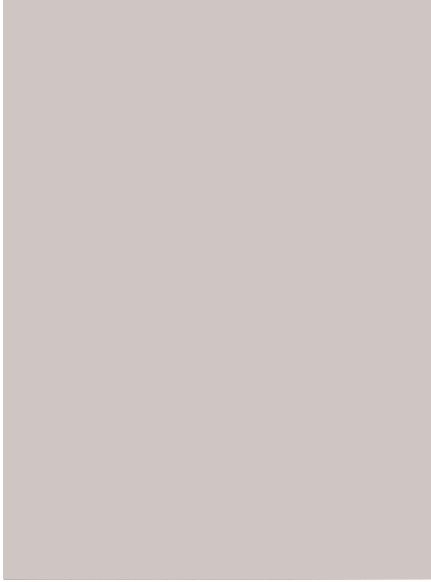


Figure 10 : Kurt Schwitters_ For Glasermerz (!Anna Blume?), 1921

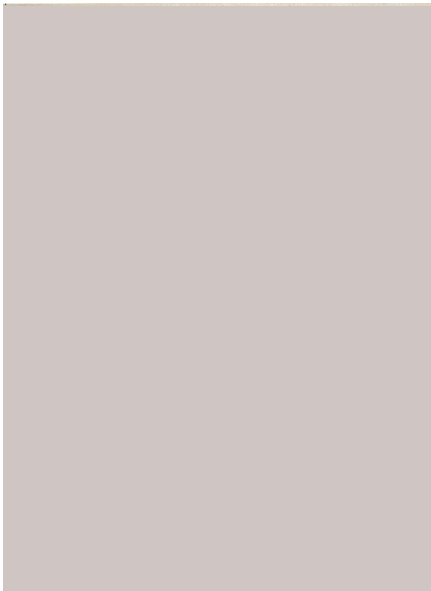


Figure 11 : Toyen and Jindřich Štyrský_ How I Found Livingstone, 1925

The idea of collage is that I can tell is a piece of newspaper, cloth, rusty metal, but when combined with other elements, it becomes something new, it gains a new meaning still allowing for the reading of the original thing. The ability to have simultaneous multiple readings is augmented by the viewer where, based of their personal and cultural association, multiply the potential readings associated to the piece. The observer's memory of a piece of French newspaper, just to name an example, would be different based on culture, age and genre.

In summary, the process of collage and its above-mentioned characteristics will work an approach that will help interrogate the design process, remain experimental and stay open to new ideas.



Figure 12 : Ron Herron_ Archigram: Tuned Suburb (detail), 1968

Senses and Experience_ architecturalization of collage

It was mentioned earlier that memory and the observer play a key role in the manifestation of multiplicity and simultaneity of readings in collage. The architecturalization of these ideas will ultimately be sensorial and experiential and will in big part rely on the tectonics of the building.

It has been suggested that “the potential of materials lies in their power to evoke rather than to dictate meaning”.⁸ If collage allows for the simultaneous reading of individual pieces as well as the reading of the whole; then the building of a global institution, such as the United Nations, could, through the use of materials, allow for the reading of each individual member as well as the collective identity of the UN.

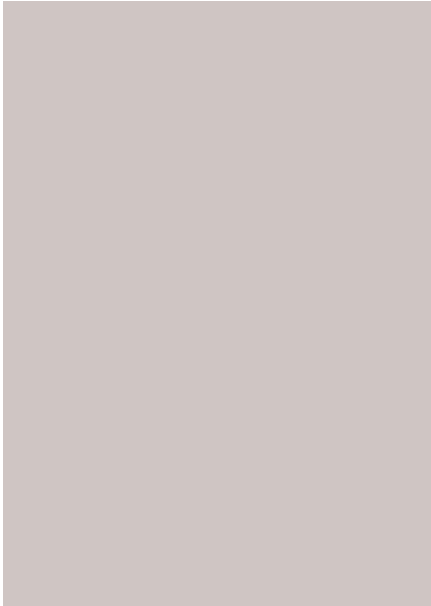


Figure 13 : Gustav Klutssis_ Millions of Workers Take Part in Socialist Competition, 1927-28

In the book *Aesthetics of Built Form*, author Alan Holgate talks about association and nostalgia and describes them as having three separate types:

1. Those stimulated by natural forms and colours, leading to thoughts of finess, delicacy and ease.
2. Relative association leading to thought of skill, wisdom, utility and propriety.
3. Accidental or personal associations, leading to thoughts peculiar to the individual.

Conversely, association can have the difficulty of endowing absolutely anything posing the danger of misplaced readings.⁹ For example, the positioning of the figural auditorium piece was discussed in many instances. Its location and visual connection to the Capitol Building was misread as confrontational and simultaneously read as a great ceremonial gesture.

Summarizing all the points, collage works as a visual and conceptual artifact of oppositional conditions where techniques of juxtaposition, layering and simultaneity, are used to challenge ideas of connection and separation; architectural concepts found nested in the culture, site and program of the building. Oppositions between nations, cultures, political identities, program pieces, circulation patterns and perspectives are collaged together to reflect the United Nations mission, agenda and values.

*“Wit, you know, is the unexpected copulation of ideas, the discovery of some occult relation between images in appearance remote from each other; and an effusion of wit, therefore, presupposes an accumulation of knowledge; a memory stored with notions, which the imagination may cull out to compose new assemblages. Whatever may be the native vigour of the mind, she can never form many combinations from few ideas, as many changes can never be rung upon a few bells. Accident may indeed sometimes produce a lucky parallel or a striking contrast; but these gifts of chance are not frequent, and he that has nothing of his own, and yet condemns himself to needless expenses must live upon loans or theft.”*¹⁰

Samuel Johnson, *The Rambler*, no. 194
(Saturday, 25 January 1752)

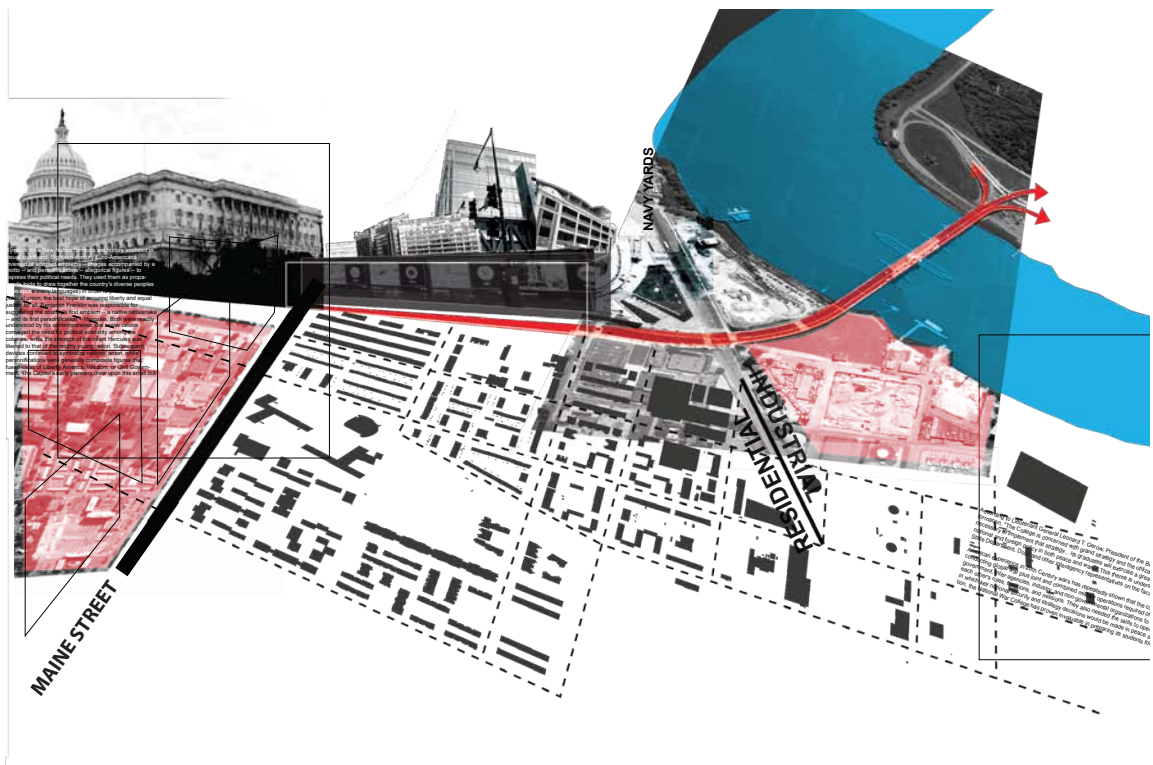


Figure 14 : Collage of site first impressions.

Chapter 2: The Site

Washington, DC, and the Southwest Waterfront

The symbolic importance of Washington, DC as the host of the proposed United Nations Consensus Building lies in its role as the Nation's Capital and the center for all branches of federal government, major international organizations' headquarters such as the, the Organization of American States and Inter-American Development Bank, just to name a few, and true global institutions as the World Bank and the International Monetary Fund.

Furthermore, this site presents itself suitable for this project due to the presence of not only cultural and architectural layers of rich history, but also juxtaposed elements, geometries and ideas. Together these elements show infinite potential for symbolic and conceptual relationships that will inform and shape the building that will ultimately result in the architecturalization of negotiated opposing conditions.

On one hand, the military base presents the opportunity for dialogue between two institutions that, although dealing with the same issues of conflict, differ greatly in their approaches. On the other hand, the visual connection to the Capitol Building can create a strong statement about the relationships of justice, negotiation and dialogue.

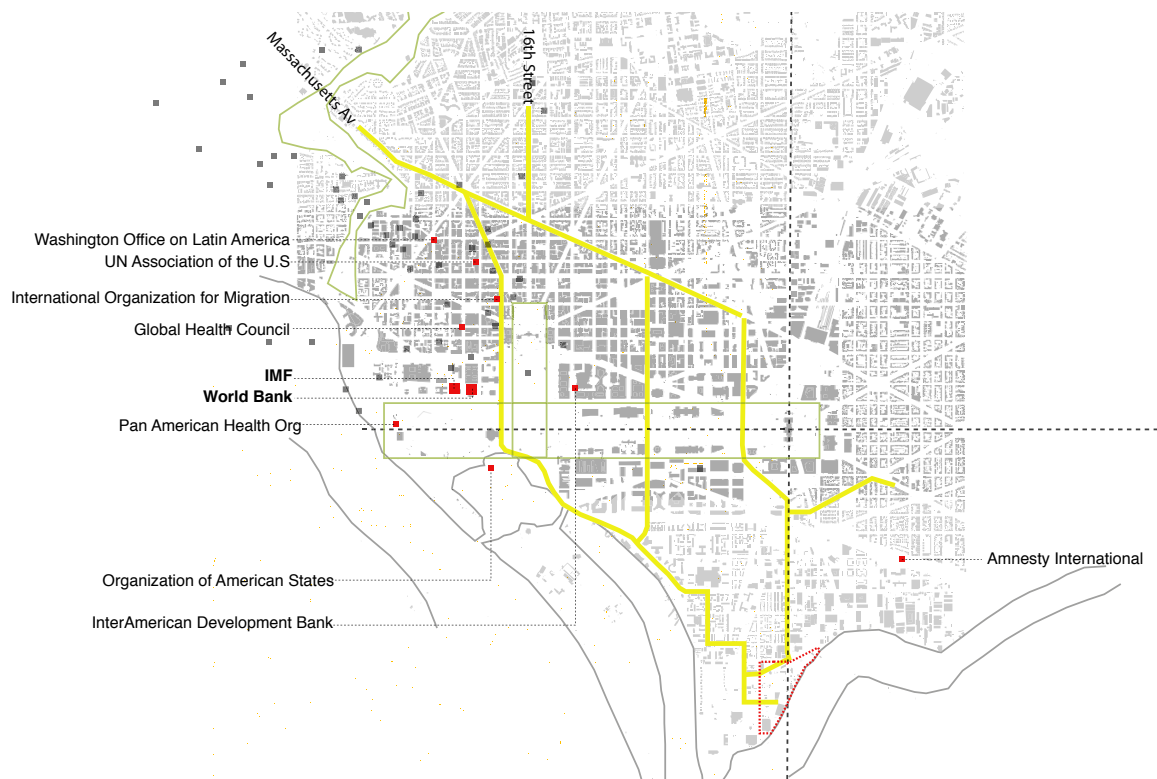


Figure 15 : Map of Washington D.C locating embassies, international and global organizations.

Project Site Location

The project site is located in Southwest Washington D.C. and is bordered to the south by the Anacostia River, to the west by Fort McNair and to the east by Navy Yards; the northern boundary remains one of symbolic importance due to its axial relationship to the Capitol Building.

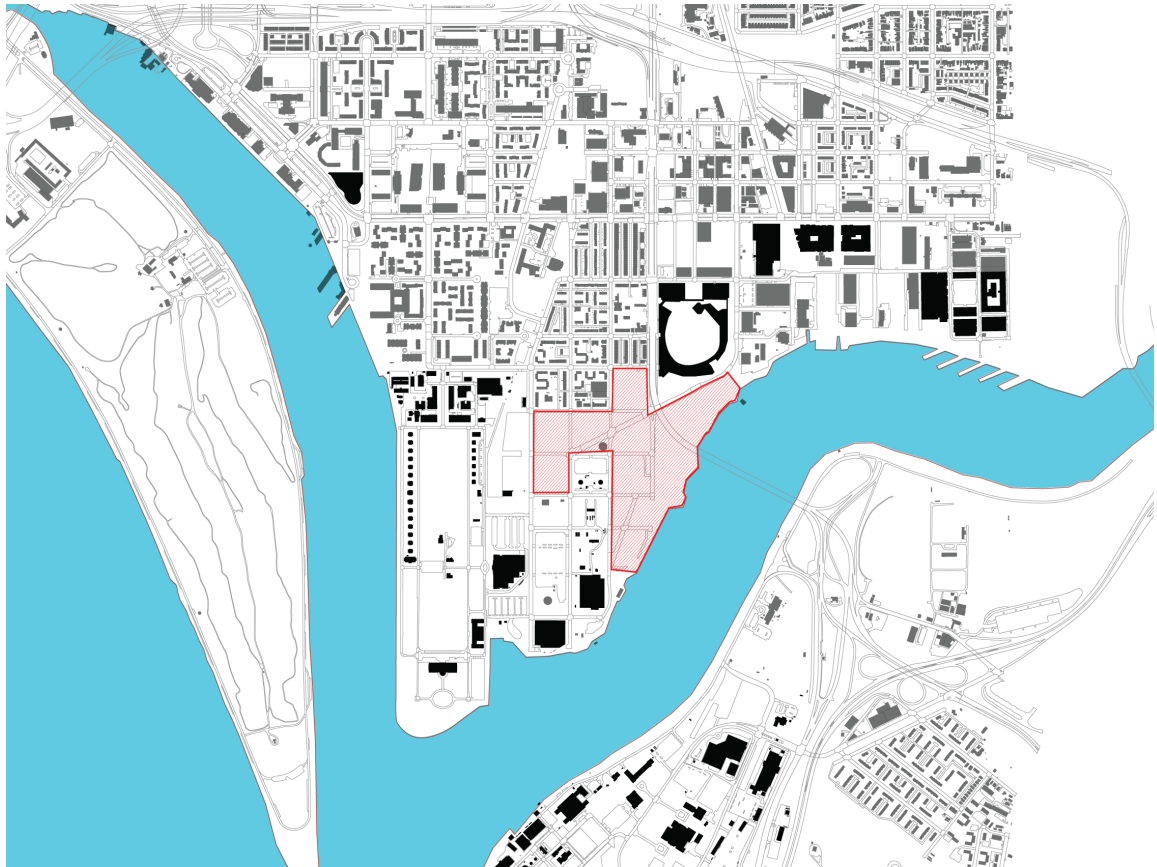


Figure 16: Project site location.

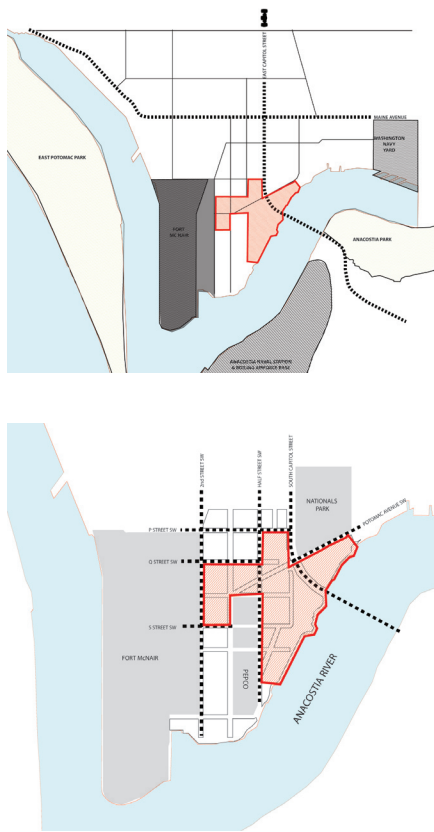


Figure 17 : Site boudaries.

The area's privatization of the waterfront to naval use and industry has remained one of the major constraints and has resulted in the irregular shape proposed for the site. A big portion of the southern waterfront's edge, on both sides of the Anacostia River, has been appropriated by the military and part of the remaining area is occupied by public utilities and industry. Due to its functional importance and their value to the city the government structures have remained untouched.

A major element in the site is the presence of South Capitol Street, which, although serving as a visual connector to the Capitol building, plays the role of a divider. This condition is visually present from Maine Avenue down to the waterfront where one can see a clear dichotomy of scales, styles and income from east to west making a clear separation in the area. The condition is also physically present when the street turns into the Frederick Douglas Memorial Bridge literally intersecting the site.



Figure 18 : Visual connections to the Capitol building from the Potomac Av. intersection with South Capitol St..

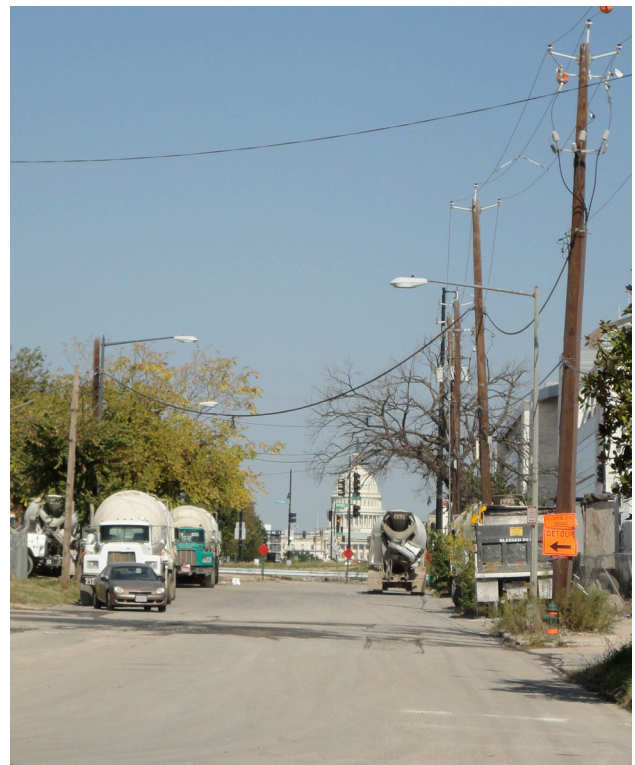


Figure 19 : Visual connections to the Capitol building from P street.



Figure 20 : Frederick Douglas Memorial Bridge intersecting the site.

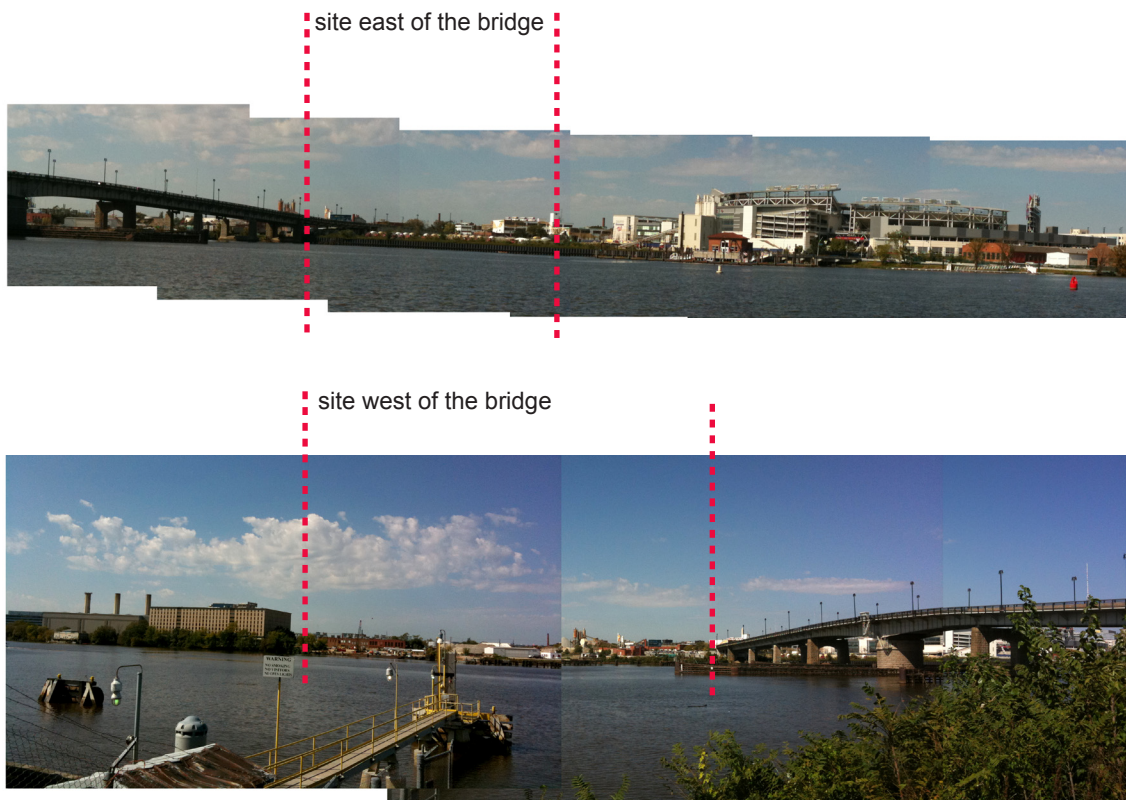


Figure 21 : Panoramic views of the site on both sides of the Frederick Douglas Memorial Bridge.

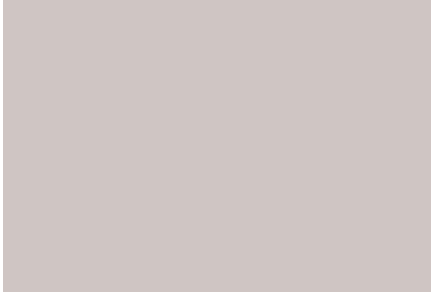


Figure 22 : Southwest Waterfront, 1977.



Figure 23 : Southwest Waterfront 1948.

The Southwest Waterfront History

As is true with many port areas, the south portion of the city, located at the confluence of the Potomac and Anacostia Rivers, has a rich economic, political and cultural history. Envisioned by L'Enfant as “a magnificent entranceway” to the city and the site of a major military reservation, the southern waterfront flourished as a commercial and industrial area that provided work and shelter for freed slaves and European immigrants, creating a community rich in cultural traditions.¹¹

With time, the area experienced a series of events that resulted in its decline. The Washington Canal was abandoned and became an open sewer until its infill in the 1870s, “limited residential dwellings or other activating uses visually and functionally separated the Southwest community from the upwardly mobile north.”¹²

Its isolation from the North became the key factor in its decline, and with time, its low-income settlements worsened, its economic and cultural diversity dissipated, and “the standard of living deteriorated to a point wherein substantial amounts of people living in alleys and gangs began to infiltrate the streets.”¹³

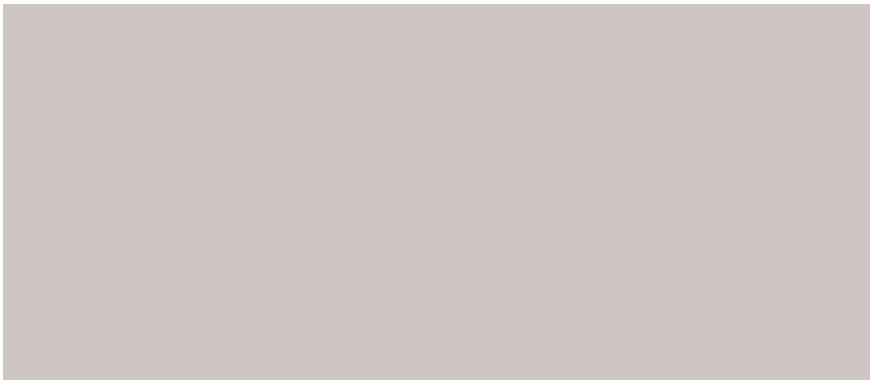


Figure 24 : Southwest Waterfront, 1900.

By the 1950s, the potential of the site, symbolically as well as economically, was rediscovered and proposals for its redevelopment emerged.

Ever since, the area has been working towards its renewal and while divisions persisted to some extent, the Southwest quadrant remains the most diverse area in the city.

The images on the following pages show the area's current conditions and diversity of not only building typologies but also program and activities ranging from a fish market, to a power plant, to government buildings. Different styles and scales are juxtaposed to reflect the neighborhoods history and diversity.



Figure 25 : Southwest Waterfront current conditions and typological diversity. Above_ historic building located at Navy Yards.

Figure 26 : Small scale townhouse north of the site.

Figure 27: New apartment buildings north east of the site.





Figure 28 : Fish market,
Figure 29 : Townhouses
Figure 30 : West waterfront promenade.
Figure 31 : Storage and repair shops
 sdjacent to the site.





Figure 32 : New Navy Yards's waterfront

Figure 33 : Power Plant adjacent to site

Figure 34 : Recycled aggregates.



Site Analysis and responses

There are two major moves proposed by this research at the urban scale. The first one relates to land uses, block sizes and density proposing a decrease in block size, an increase in density and a change from strictly residential use to mixed use.

The second one relates to the Southwest waterfront and proposes to continue the waterfront promenade started by the developments happening east and west of the site; and to reintegrate the area to the city by providing an edge and a public park.



Figure 35 : Satellite view of the site showing three major areas of intervention. Red represents the blocks and density, green represents the public park and blue represents the building.

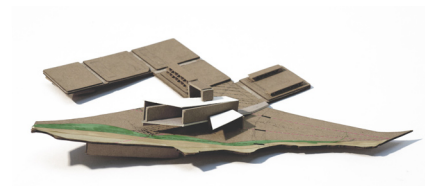
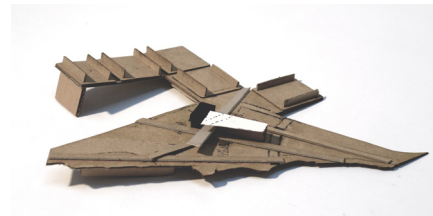
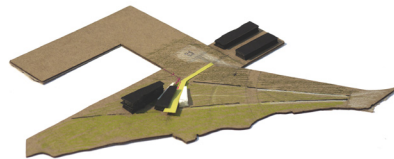
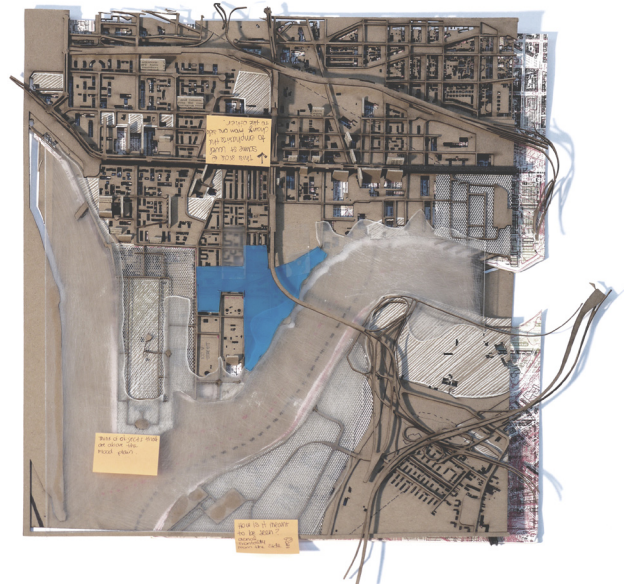


Figure 36 : Above, first analytical site model. Below (starting at the bottom), site topography, existing structures and massing studies inserts for site model (see Figure4).



Figure 37 : Analytical site model, scale 1' 0" = 250' 0"

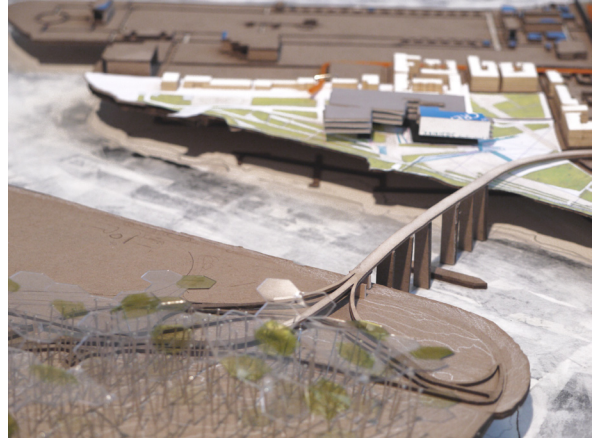


Figure 38 : Close up pictures of 1:250 site model

Figure Ground:

The figure ground shows a clear scale difference of the 4 quadrants created by South Capitol Street and Interstate 395.

The southwest quadrant and the northeast quadrant share the same small residential scale while the northwest and southeast quadrant shows a jump in scale that corresponds to federal, commercial and residential apartment buildings.



Figure 39 : Fogure Ground

The density and texture of the city is more consistent to the north of 395 and it dissipates as it moves south towards the water where the residual quality of the project site and the surrounding area becomes evident.

As mentioned earlier one of the thesis propositions deals with the urban fabric of the area surrounding the proposed site. As seen in figures 25 through 28, the scheme seeks to increase the areas density to define a better edge for the United Nations front plaza and revitalize the waterfront by allowing for mixed use. The proposed mixed use should allow for retail, commercial and residential. The residential will include temporary housing for delegates and permanent housing for staff. The west side directly adjacent to the site would be strictly designated for institutions related to the United Nations.

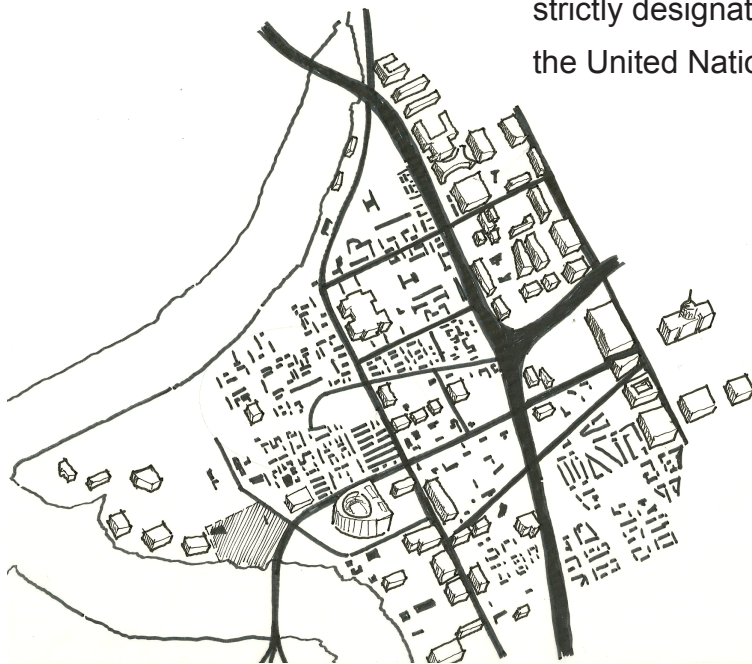


Figure 40 : Axonometric diagram showing the jumps in building scale



Figure 41 : Existing site's figure ground

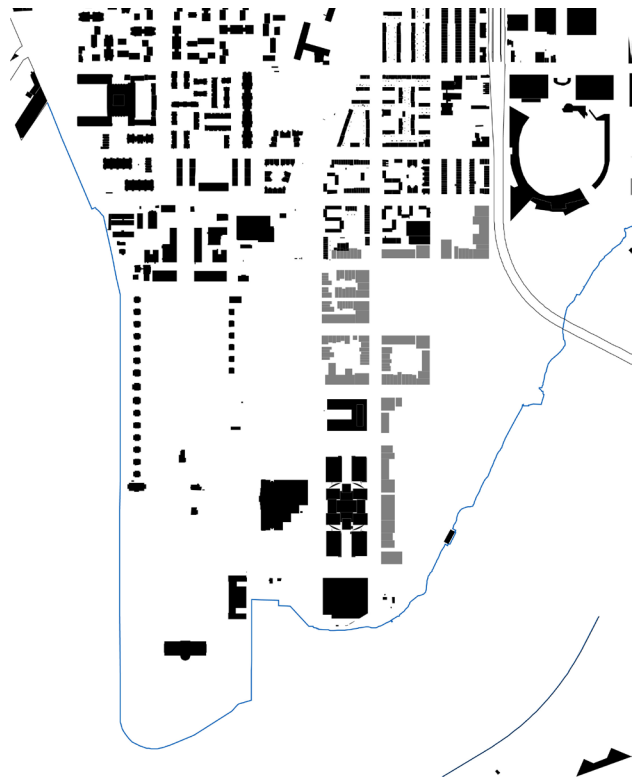


Figure 42 : Proposed buildings in grey

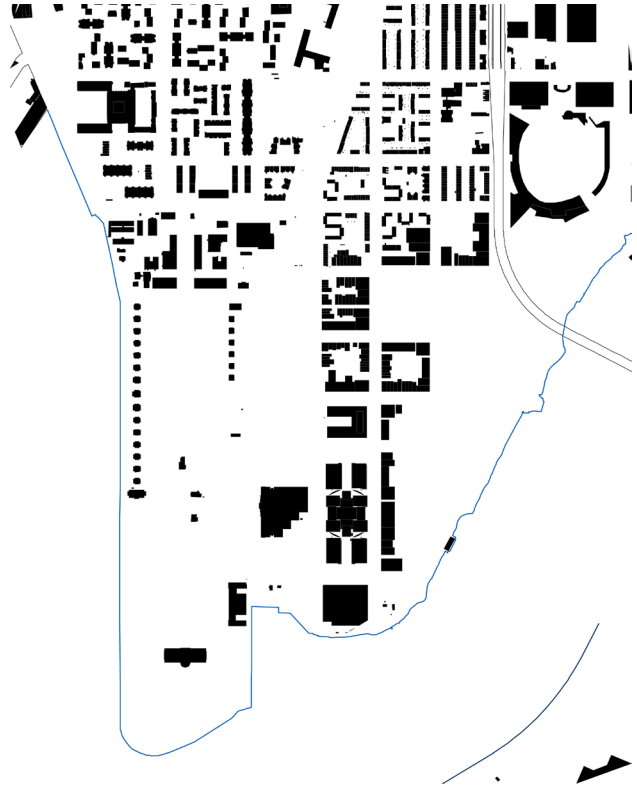


Figure 43 : Proposed figure ground

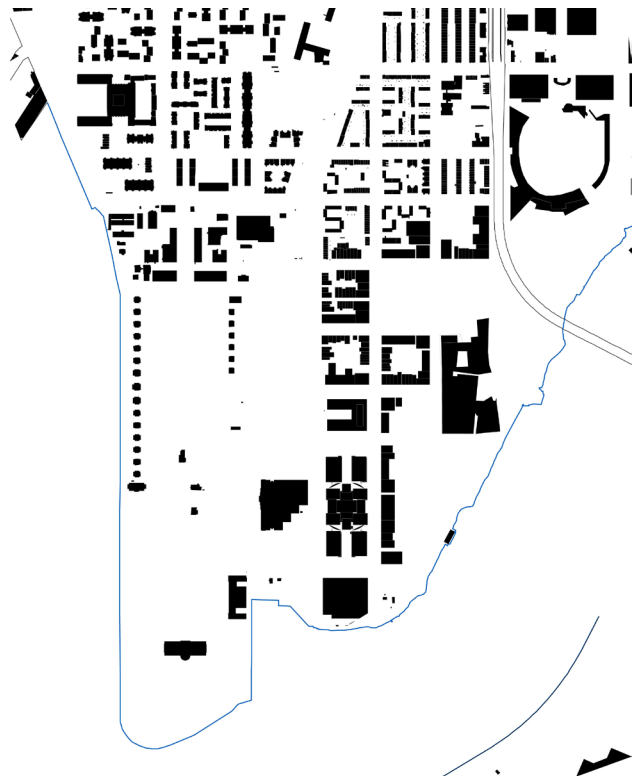


Figure 44 : Proposed figure ground including United Nations building

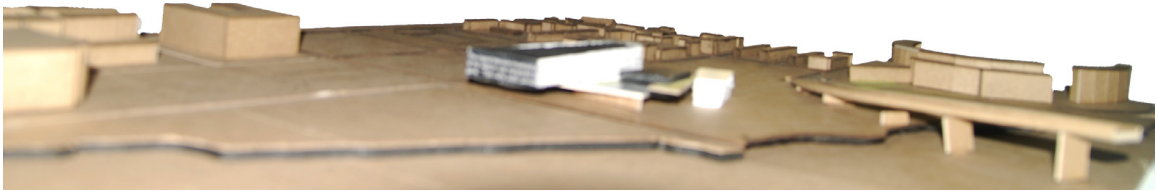
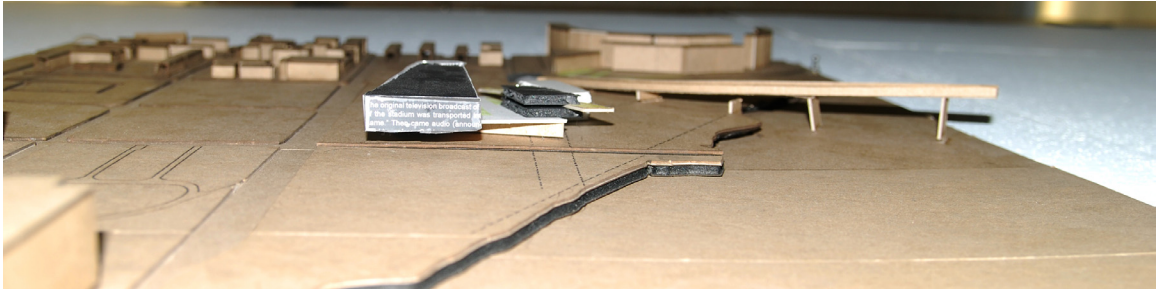


Figure 45 : 1:100 study model showing massing and program explorations.



Urban grid and city Blocks:

For the most part the city has a consistent orthogonal grid, with the exception of the diagonal avenues, that gets broken up south of Interstate 395 as it approaches the site location. This thesis extends the city grid and uses it to shape the built and landscape components of the project. A challenge for the design of the building was the negotiation of an infinite number of geometries present in the site. Figures 31 through 35 show the different kinds of lines affecting the area and how they have been taken into consideration for the design of the building.



Figure 46 : Urban grid



Figure 47 : City blocks

Additionally the city blocks had to be taken into consideration to make a stronger argument for the reintegration of the area in the city. North of Interstate 395 blocks show consistency and correspondence to the building types they house; the federal district to the northwest has bigger blocks while Capitol Hill has smaller blocks that portray the residential nature of the neighborhood. Unlike the north area, the city blocks to the south show no specific correspondence to its residential or commercial nature, in fact, they loose definition and constantly vary in size, shape and proportion. What this thesis proposes is to reduce block sizes where necessary and increase their density still allowing for a smooth transition back into the neighborhood north of the site.

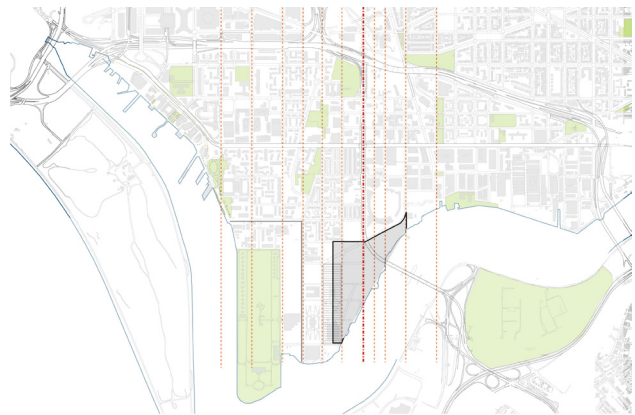


Figure 48 : North - south grid extension

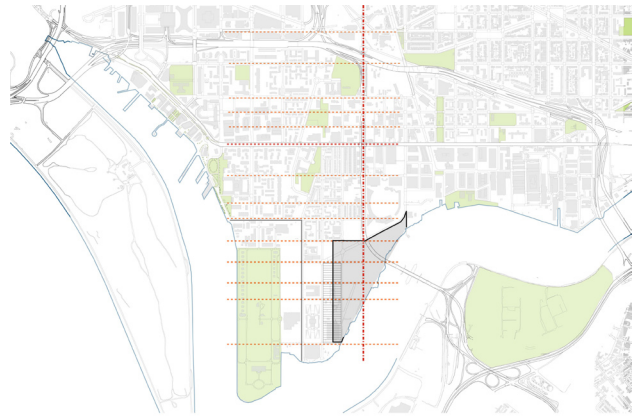


Figure 49 :East-west grid extension



Figure 50 : River's edge geometry extension

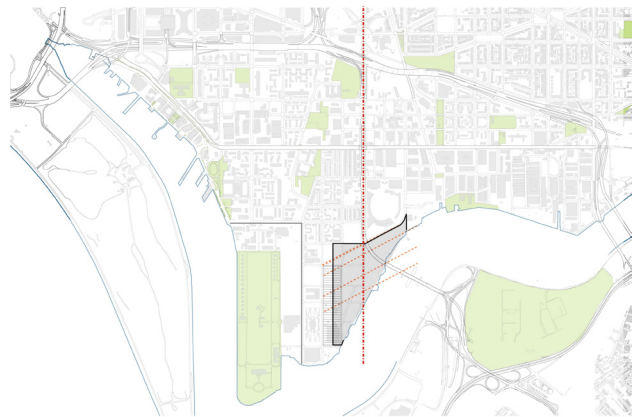


Figure 51 : Potomac Av. geometry extension



Figure 52 : Final proposal showing geometries taken into consideration in the design.

Streets and Public transportation:

There are 3 major streets running north south that connect the Southwest Waterfront back to the city; these are 7th street to the west, South Capitol street running directly over the site and New Jersey Avenue to the east. Running perpendicular to the site are Maine Avenue or M Street NW that turns into Rock Creek Park and runs perpendicular to the water. Figure 39 shows potential vehicular access to and from the site.

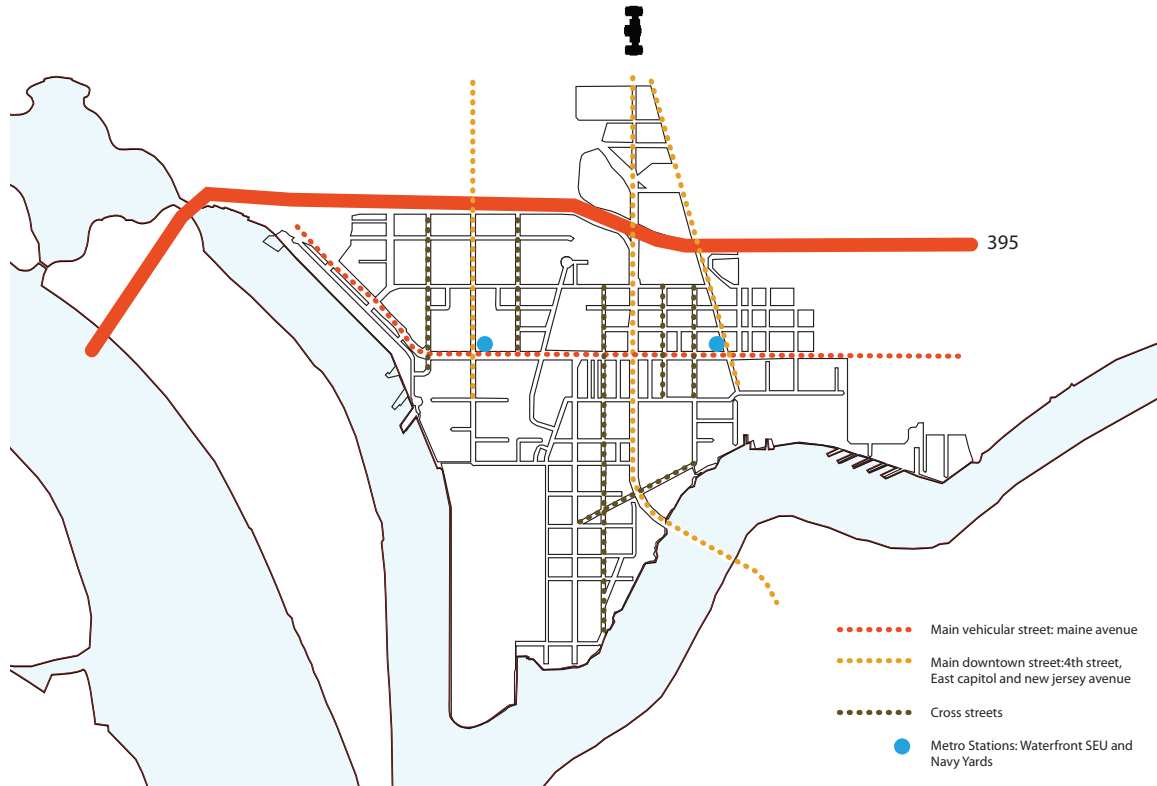


Figure 53 : Diagram of primary, secondary and tertiary roads and closest metro stations.

The site is conveniently located within the ten minute walking radius of two metro stations. Located on M and 4th streets is the Waterfront SEU Station and a few blocks east, on New Jersey Avenue and M Street, is the Navy Yards Station. Figure 38 shows potential pedestrian patterns to and from the site.



Figure 54 : Diagram of 5 and 10 min walking radius from site and proximity to metro stations.

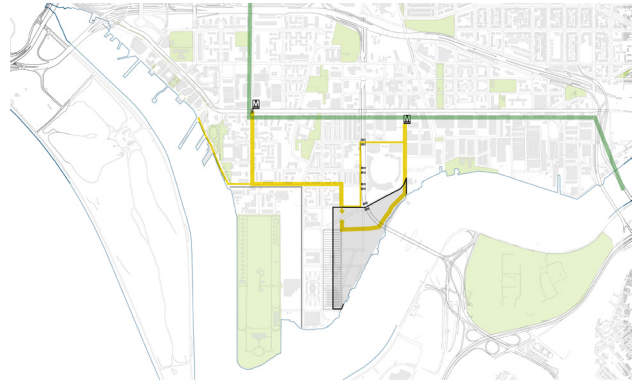


Figure 55 : Potential pedestrian access to the site from metro stations and proposed waterfront promenade.

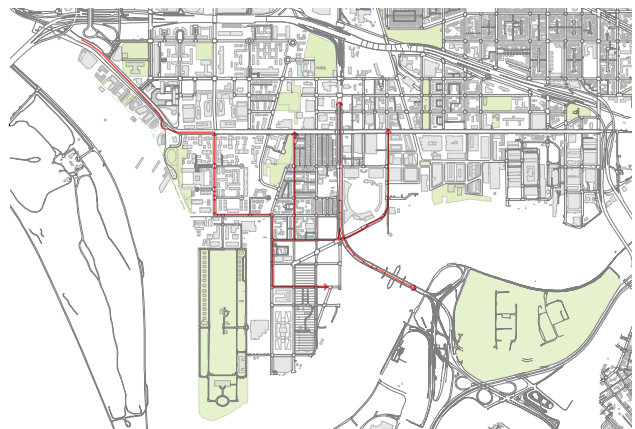


Figure 56 : Potential vehicular access to the site.

Flood Plains:

It has recently been brought up that many areas of D.C. will be soon underwater. The mall already floods frequently around the Tidal Basin. The area, but not specifically the site, is prone to flooding. An image of the flooding of 1942 shows Navy Yards and Fort McNair completely flooded. The 100-year flood plane drawing shows how most of fort Mc Nair and parts of the site are potentially susceptible to some major flooding.

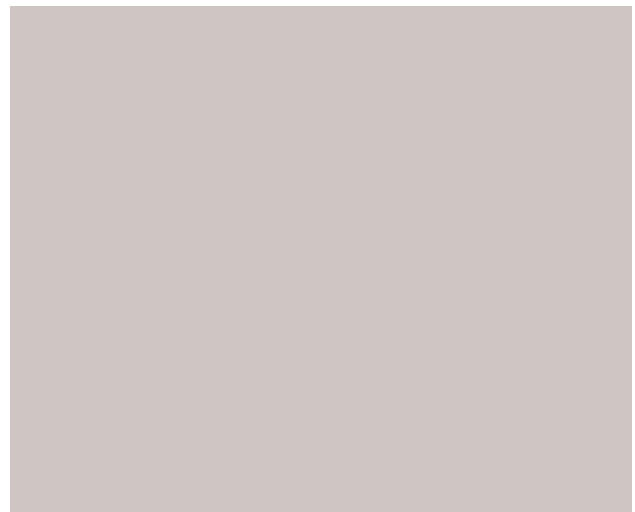


Figure 57 : Navy Yard flood of 1942.

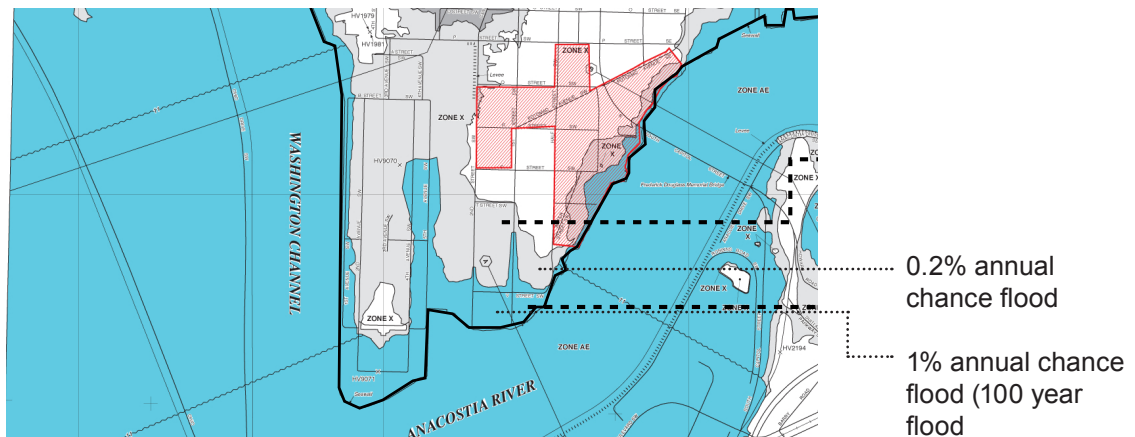


Figure 58 : 100 year flood plane diagram

Figure 59 : security and water diversion barrier.



Contrary to Fort McNair, which is very much grounded in the site, this thesis seeks to negotiate with the ground by elevating the building to the south to allow for flooding to happen without creating any damage to the building or interruption of the daily activities and grounding the building to the north portion of the site to hold the plaza's edge and create a more secure front. Additionally the east pool works as a security barrier for the building as well as a water diversion barrier that will divert water as the river floods.

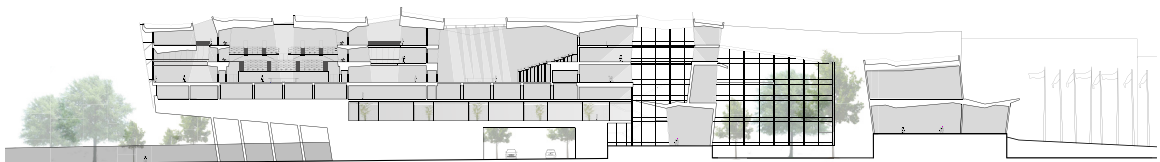


Figure 60 : Section showing the grounding of the building to the north and the elevated section to the south.

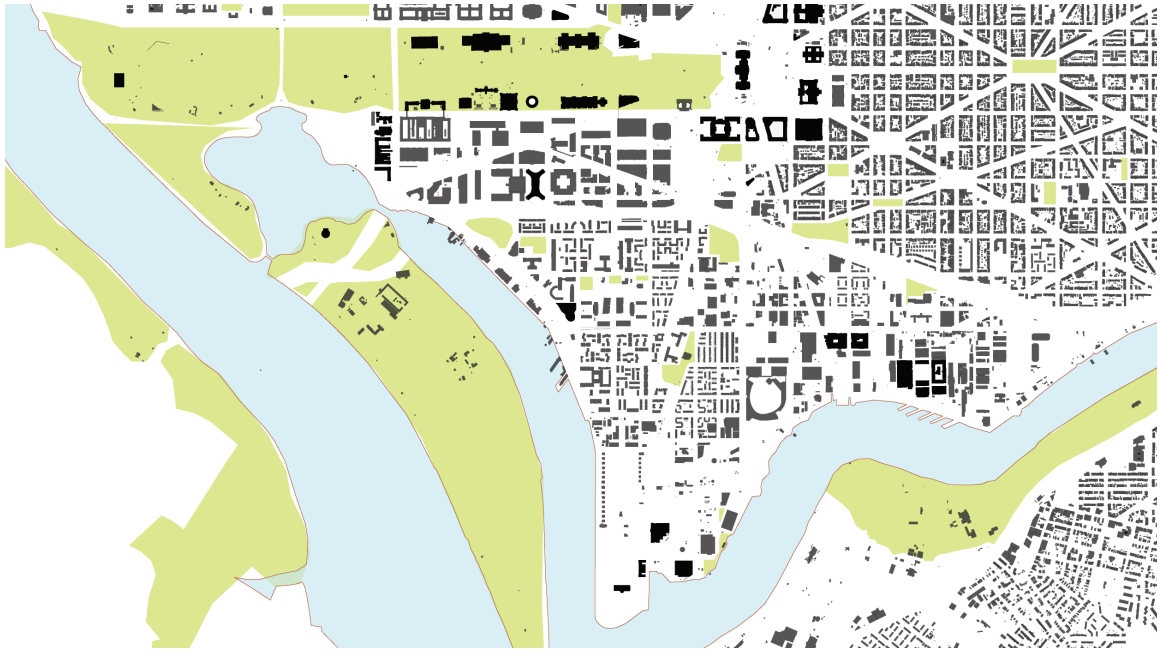


Figure 61 : Parks and vegetation in the area

Parks and Vegetation:

The site is surrounded by two major parks; to the south and across from the Anacostia River is the Anacostia Park. To the west and across from the Potomac River is the East Potomac Park. The only other major green area of that scale is the mall. Fort McNair is mostly green but is not open to the public. Outside from the waterfront development west of the site and the new Navy Yards waterfront east of the site there are not many green public spaces.

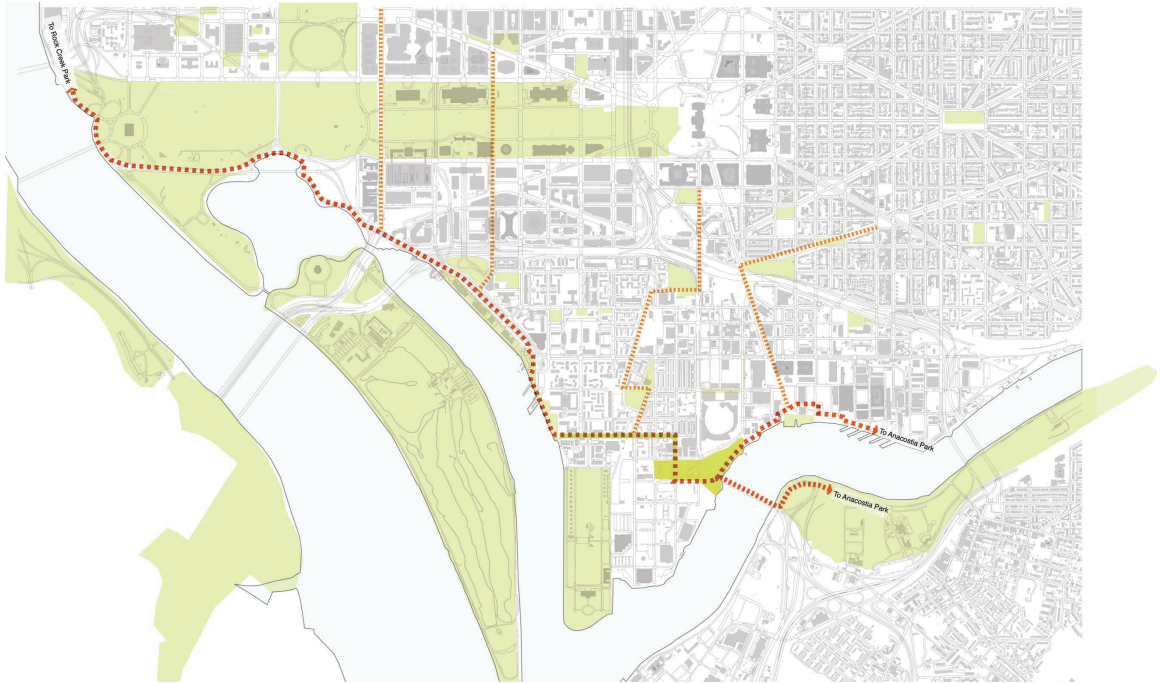


Figure 62 : Proposed connections to waterfront promenade and the city's park system.

It is apparent, given the new developments happening in the South area of Washington D.C., that the city is trying to revitalize the city's waterfront and continue the waterfront promenade running all the way back to Georgetown. The continuity of such promenade is interrupted by the presence of Fort McNair who, due to security purposes, has restricted access. Assuming that Fort McNair will remain closed to the public, the challenge for the thesis was to negotiate different strategies that will seamlessly connect not only to the above-mentioned developments, the existing waterfront promenade and the proposed public park, but also to a secondary public park system that will connect back to the mall.



Figure 63 : Proposed landscape plan.

Figure 64: Axonometric showing the UN building, the increases in density and height of surrounding buildings, the green connector and public park.





Figure 65 : United Nations logo

Chapter 3: The United Nations

A big portion of the thesis research was dedicated to the understanding of the United Nations as an institution; the structure, organization and programmatic elements had to be carefully analyzed to inform the design for the proposed UN Consensus Building.

Additionally, a clear understanding of the organization's mission and values was necessary to successfully connect them back to the thesis' ideas of conflict, negotiation and collage.

This thesis acknowledges the existence of conflict and leans toward the curve of oppositions recognizing that the important aspect of the Consensus Building program is negotiation.

Equally relevant and key in connecting the institution back to oppositions and consequently collage is the idea that in conflict people are often in opposition but they are here because they have at least one collective identity. Thus, analogous to the way collage allows for the simultaneous reading of individual pieces as well as the reading of the whole, this building will allow for the reading of each individual member as well as the reading of the collective identity that constitutes the United Nations.

United Nations Headquarters, NY

“ To us falls the task of mankind the Headquarters of the United Nations an appropriate representation of the progress of history and a promise for the future that will be constantly telling mankind that we are working in harmony; that we are maintaining unity. In this way we can contribute toward that great objective to which we aspire – the avoidance of war.” ¹⁴

*Warren R. Austin,
Headquarters Advisory
Committee Chairman*

The United Nations Headquarters constitutes, in people's minds, the visual symbol of hope for world peace and the expression of the world organization. The League of Nations was the forerunner of the UN, an organization that was established to "promote international cooperation and to achieve peace and security," ¹⁵ but, it ceased to exist after failing to prevent the Second World War. The United Nations was formed in 1945 and planning for its Headquarters started in 1947 to work as "the center of a worldwide network of diplomatic activity, peacekeeping efforts, specialized agencies, and nongovernmental organizations representing a world public" ¹⁶

Since its creation, the UN has more than tripled its membership to include 192 Member States such as China, France, the Russian Federation, the United Kingdom and the United States.

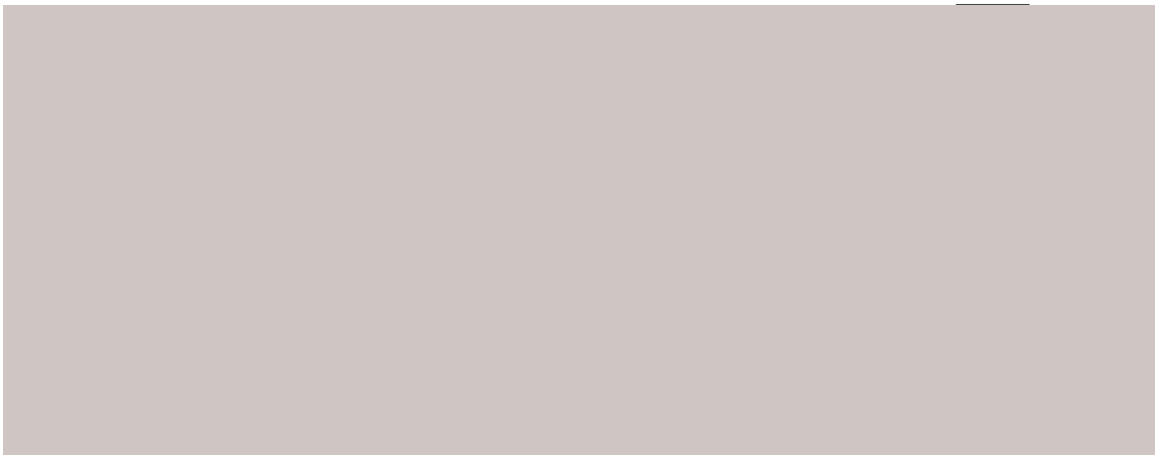


Figure 66 : Map of United Nations Member States by their dates of admission.

The Buildings

“Neither an office building nor an international parliament, but a “workshop for peace.” ¹⁷

Wallace

K. Harrison, Director of Planning

The United Nations Headquarters’ site was chosen to be in New York City for being one of the main crossroads of international transportation and communication.

This location also offers a wide base of technical, commercial, cultural, residential, recreational and social resources within easy reach. The site is bounded by the East River, Forty-second Street, First Avenue and Forty-eighth Street; “forming an enclave in the City, State and Nation, with specific right of extraterritoriality.” ¹⁸

Program Organization

The organization of the different building elements had to be taken into careful consideration due to the nature of the institution and the levels of interaction between delegates, staff, press and public. The organization of the building can be summarized into four groupings: the conference area, the Secretariat Building, the Auxiliary Elements and the Buildings for Delegations and Specialized Agencies.¹⁹



Figure 67 : Grouping of UN Headquarters' building elements.

Conference Area

The conference area consists of the General Assembly Hall, the council chambers, conference rooms and the committee rooms. All rooms range in size from 43,000 square feet for the former to 1,900 square feet for the latter. The General Assembly Hall is the most important element in this grouping, not only for its size but also because it houses delegates from all member states along with the press and the public for two or three months each year.²⁰

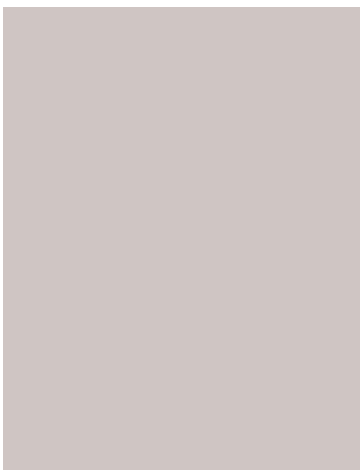


Figure 68 : General Assembly room interior images.

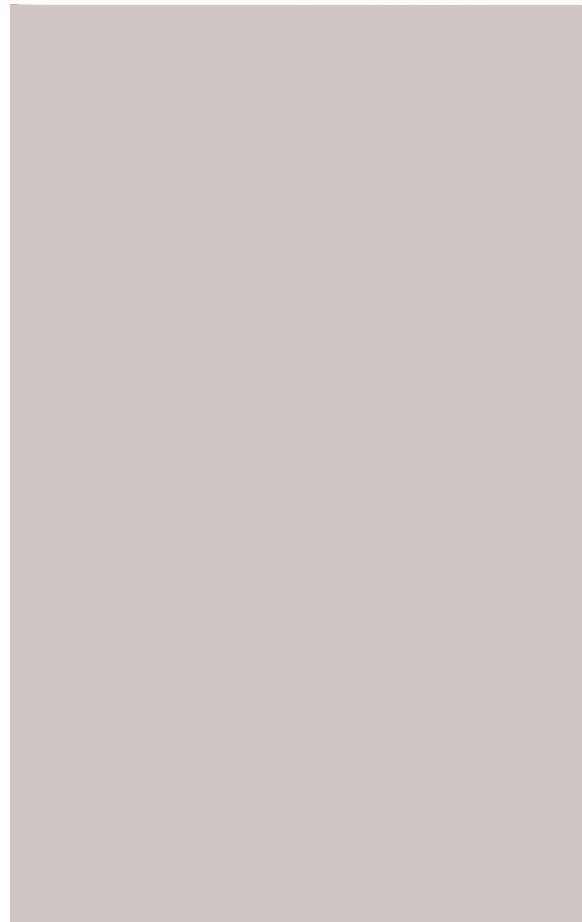


Figure 69 : General Assembly room plan and section.

Figure 70 : Picture of one of the many conference room interiors.

Figure 71 : Plan and section of one of the mid-size conference rooms.



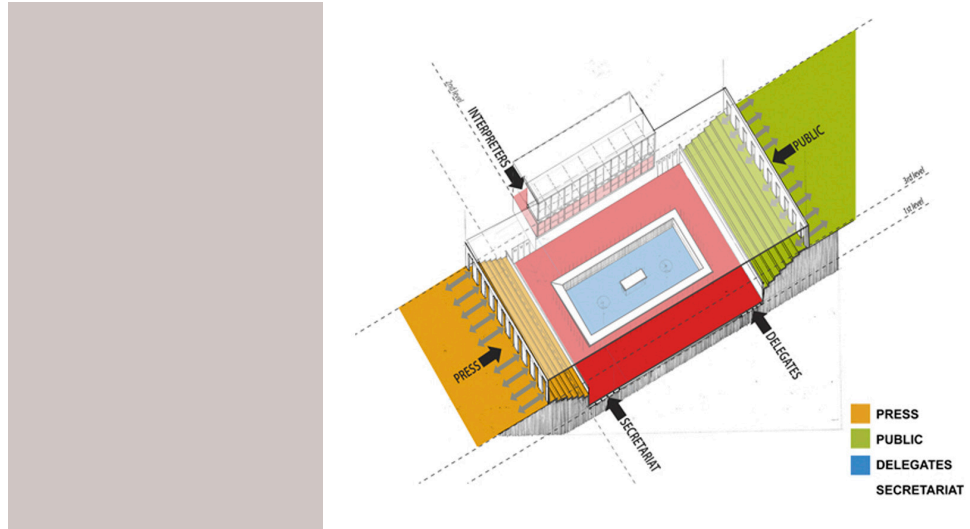
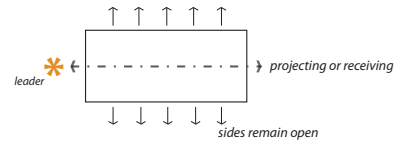


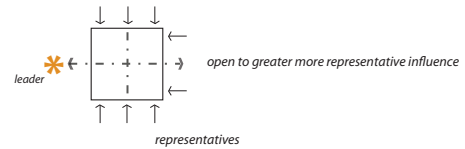
Figure 72 : Diagram describing different levels of accessibility based on user.

AESTHETICS VS NEGOTIATION *Hierarchichal/ political symbolism*

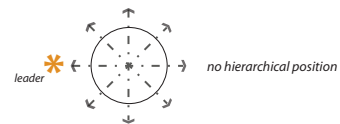
HIERARCHICAL LONG AXIS: *promotes adversity*



4 EQUAL SIDES



KING ARTHUR'S MYTH: *promotes good will*



ONE OF THE TEAM: *hierarchy on short axis & equal spacing*

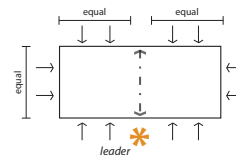


Figure 73 : Diagram of hierarchichal and political symbolism based on negotiation table geometry.

Figure 74 : International Broadcasting Centre's (IBC) control room.



Figure 75 : One of the five radio studios used for news, current affairs, in-depth feature and documentary programming.

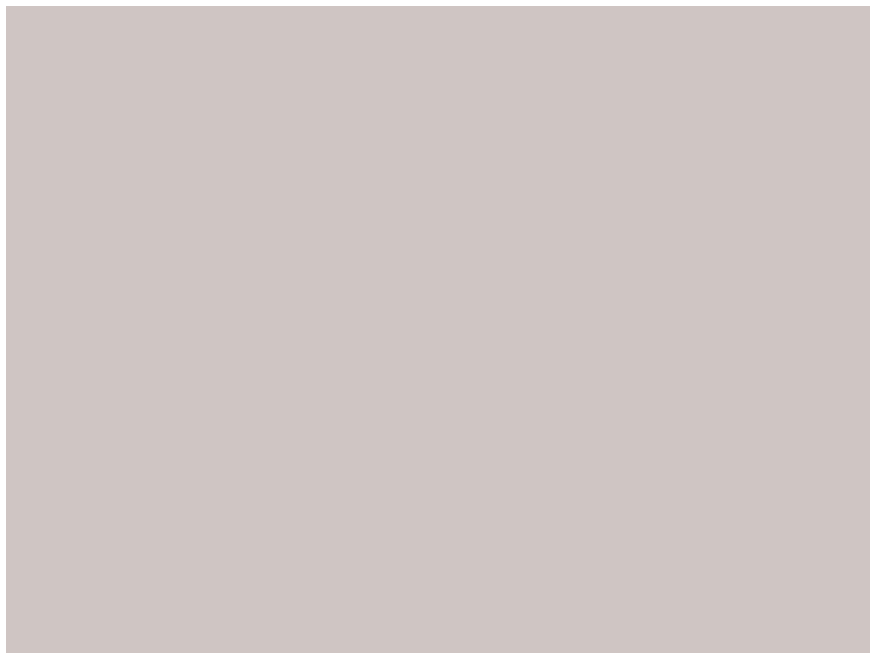
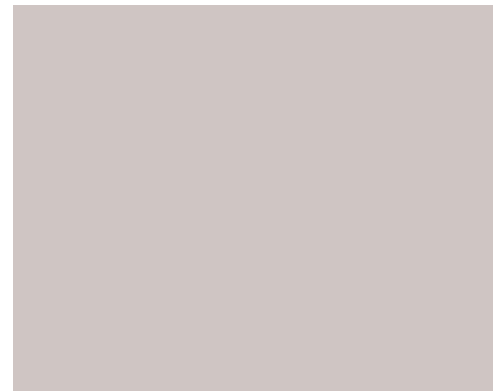


Figure 76 : Main control rooms for incoming and outgoing feeds for the U.N.'s radio and television broadcasts.

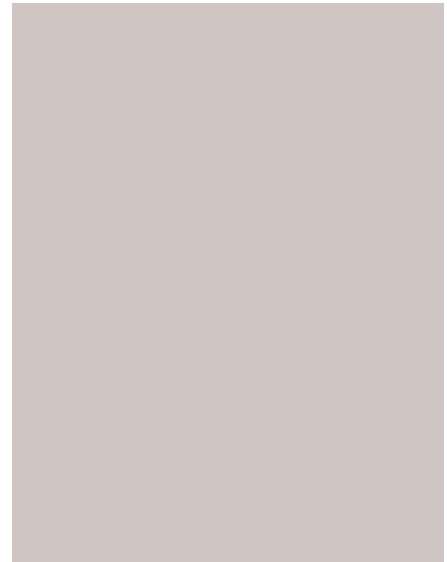
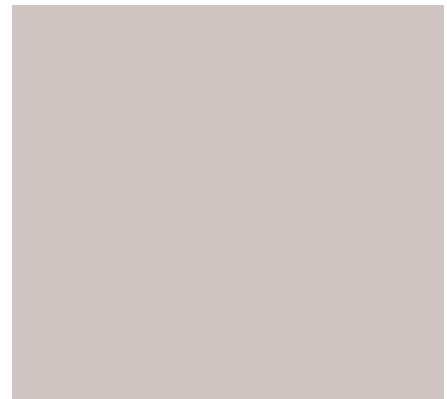


Figure 77 : Radio studio. Since 2000, a daily live 15 minute programme has been produced in the U.N.'s official languages and distributed to 174 radio stations.



The Secretariat Building

The Secretariat Building houses an internationally recruited Civil Service that is in charge of keeping the United Nations running by handling the current business, preparing international meetings, etc. It is divided among administrative bureau, divisions, sections and units. The building's location in the site is due to two major forces, closeness to transportation and its relationship to the conference area. The Secretariat Building has the greatest daily flow of population; hence, its convenient location to major cross-town transportation systems. Officials working on the building need "easy and convenient access to the meeting places—the unimpeded interflow of persons and documents—is an obvious necessity" ²¹ hinting its location in relation to the Assembly Hall and the conference rooms.

Auxiliary Elements

The following elements serve as the connector of “set pieces within this labyrinth of ceremonial spaces, circulation and places to gather or meet one another ...”.²² These components are the library, exhibition halls, staff facilities, restaurants and parking. The Library houses about 1,500,000 volumes necessary for the variety of research carried on by the Secretariat employees. The Exhibition halls, serve as visual and graphic explanations of matters important for the public, delegates and employees. It is mainly included in lounges and lobbies but also along major circulation corridors.

The Staff Facilities are for the convenience and recreation of all persons working in the Buildings. It includes lounges, clubrooms, gymnasium, game courts, theater, clinic, and post office, among others adding up to about 58,800 sf. The restaurants are dispersed throughout the facilities and are divided into the staff dinning room, cafeterias, delegate’s dinning room, public cafeterias, kitchens and central food storage. The final one is parking, located on two levels below grade and allowing for an approximate total of 1,900 vehicles.²³

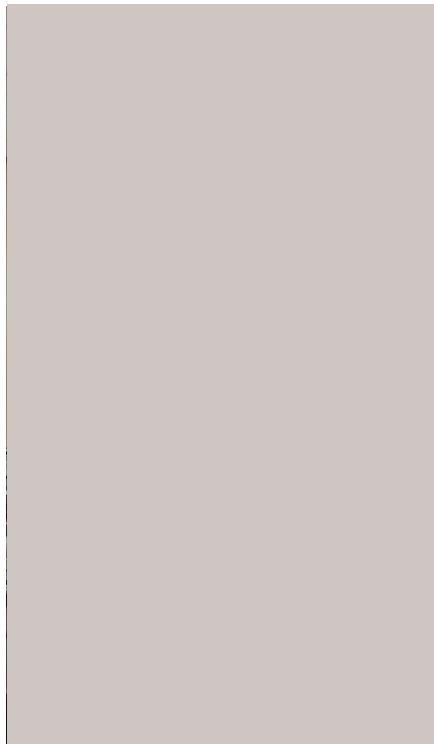


Figure 78 : The library contains approximately 400,000 volumes in its general collection and other documents like newspapers, periodicals, maps, science, international relations, energy, among others

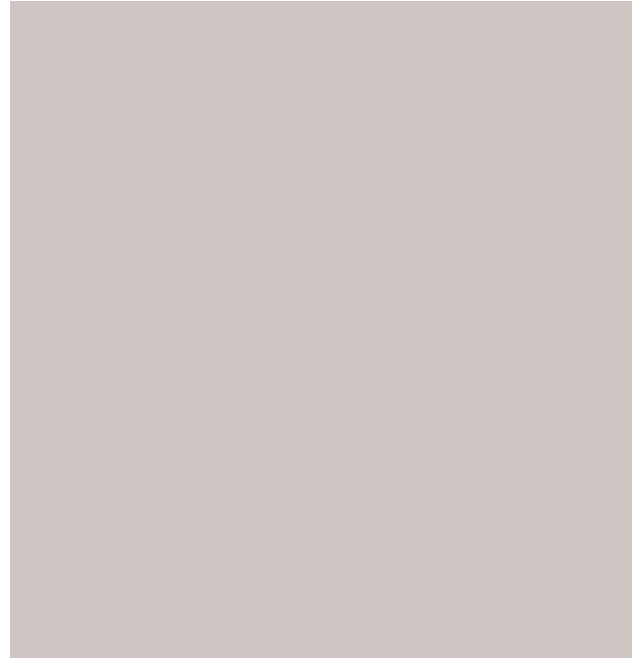
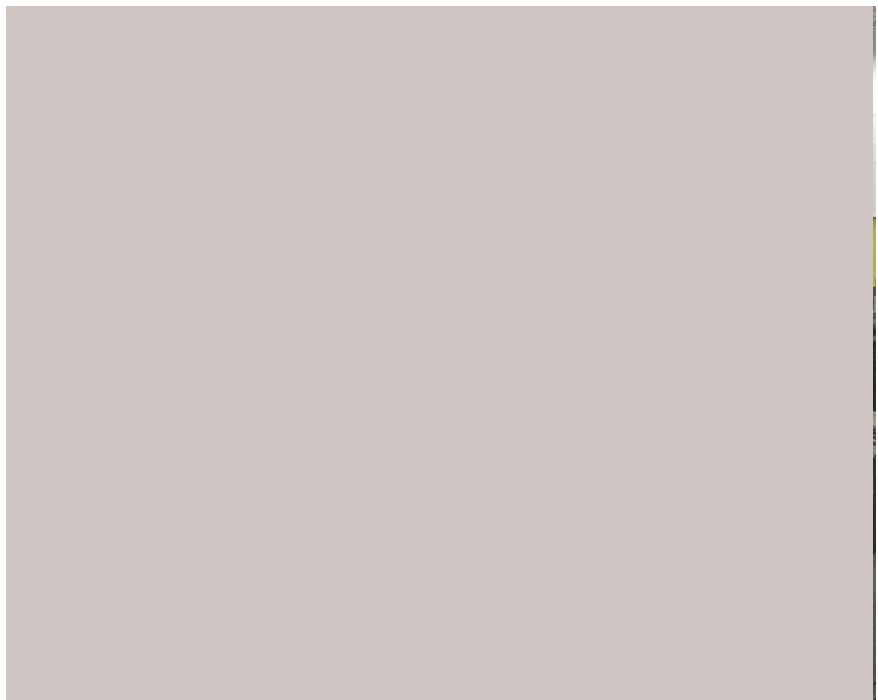


Figure 79 : 24 hour printing press for the generation of publications and periodicals, color posters and brochures, all in the six official languages



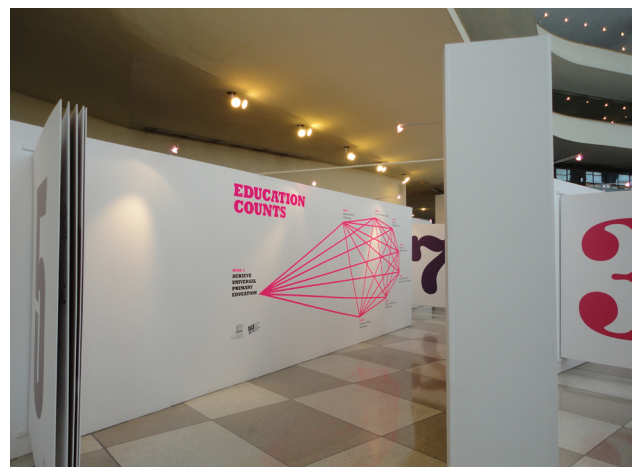
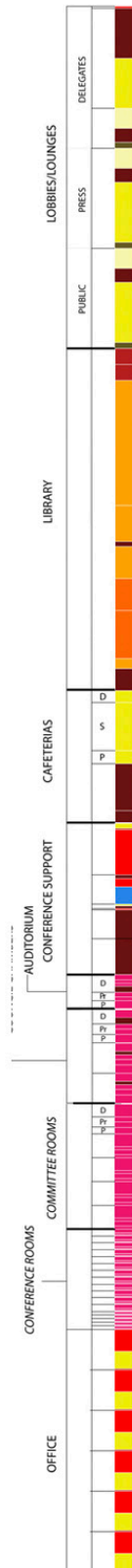


Figure 80 : Current U.N Exhibition on public lobby. A big part of the institution is dedicated to didactic exhibitions on a variety of subjects related to the work of the UN and world issues.



Figure 81 : Current United Nations' Exhibition. The pictures show the flexibility needed for the exhibition spaces and the important role that plays the wall. As seen on this pictures the wall takes a series of roles and adaptations to fit with the existing exhibition.



The organization of the proposed building can be summarized into 4 main cores: the administration, the research, the negotiation and the diplomatic core.

The administration core will be the equivalent of the secretariat building handling the current business and preparing international meetings and will be divided among administrative bureau, divisions and units.

The research core houses the library which has the print and media documents necessary for the research carried by the staff, as well as recordings and documentation of previous negotiations accessible to the public. Part of the research core is the screen located on the east façade, the role of this screen is to engage with the public and maintain the public updated on major achievements in negotiations and other United Nations related issues.

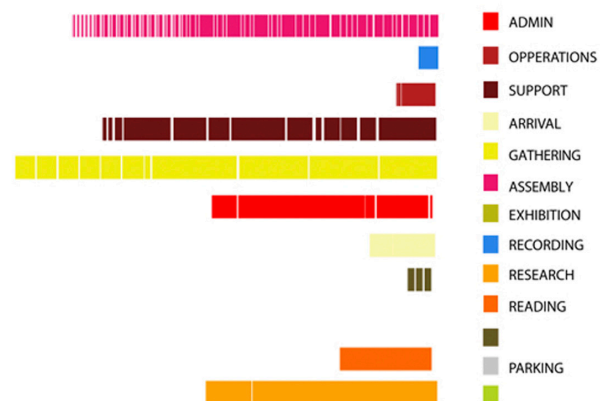


Figure 82 : Study of program components and square footage comparison.

The negotiation core houses the different scales of conference rooms necessary for the variety of negotiations happening simultaneously. The building can house 1 party talks, 2 party talks or five party talks going on simultaneously.

The assembly hall is the biggest of them all and works as a figural piece with views back to the Capitol building, the water and the School of War. There are two medium conference rooms, one of them has fixed seating while the other has the flexibility to be divided up to three times and seating can be arranged in a variety of different ways. The remaining conference rooms vary in size with capacities to seat from 30 to 6 people. Public access into the negotiations is only allowed in the medium and large conference rooms.

The Diplomatic core consists of a series of extremely secure and isolated offices that are assigned to delegates present in the negotiations taken place at the moment. These spaces are sovereign to their assigned countries until the negotiations end.

PROGRAM

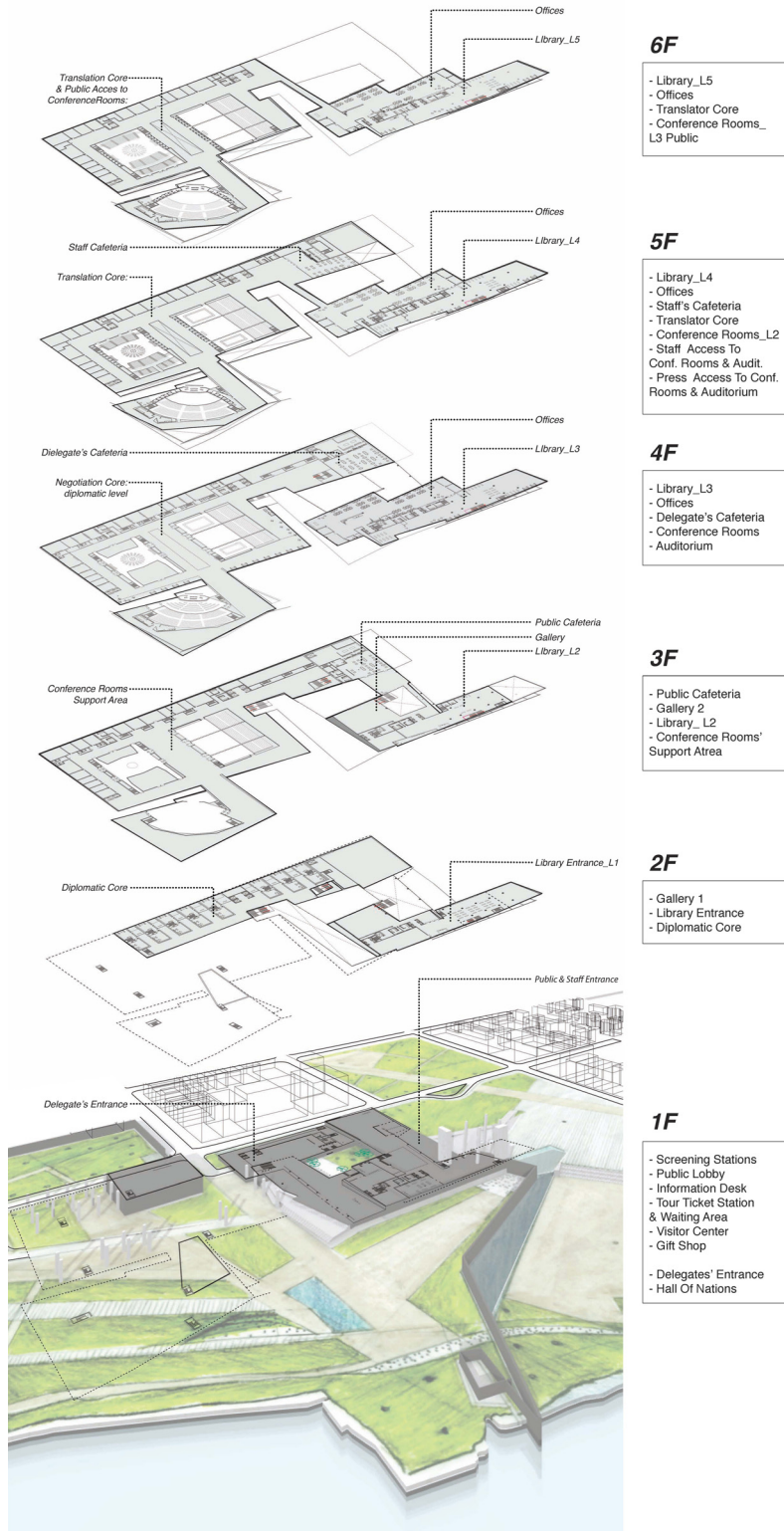


Figure 83 : Proposed program organization by floor. Program elements include:

- Public & Staff Entrance
- Delegate's Entrance
- Visitor Center
- Gift Shop
- Exhibition space
- Library
- Cafeterias
- Diplomatic Core
- Negotiation Core
- Administration Core

Circulation

Close attention was placed to circulation, both horizontal and vertical, exterior and interior, to create order and give to each function of the organization its own time and space in which to work. Delegates, Secretariat personnel, Press and the public should find their way automatically and with ease. (24) The circulation is for the most part horizontal with secondary vertical movement consisting of escalators, elevators, stairs and ramps. Strict segregation from the Press and the Public need to be considered. The Press has designated work areas and lounges with direct access to the exhibition halls, the Secretariat buildings and some portions of the Delegate's area for interviews. The Public, on the other hand, must be strictly kept from mingling with the Delegates, Secretariat and the Press. Their separate entrances should lead via lobby, lounge and exhibition hall directly to all public galleries in all meeting halls.

A similar approach was taken for the design of the circulation throughout the building. Figures 22 through 25 show diagrams explaining the proposed circulation patterns based on user.



Figure 84 : Vehicular exyerior circulation diagram for the UN Headquarters



Figure 85 :Interior vertical circulation diagram for the UN Headquarters

CIRCULATION_Public

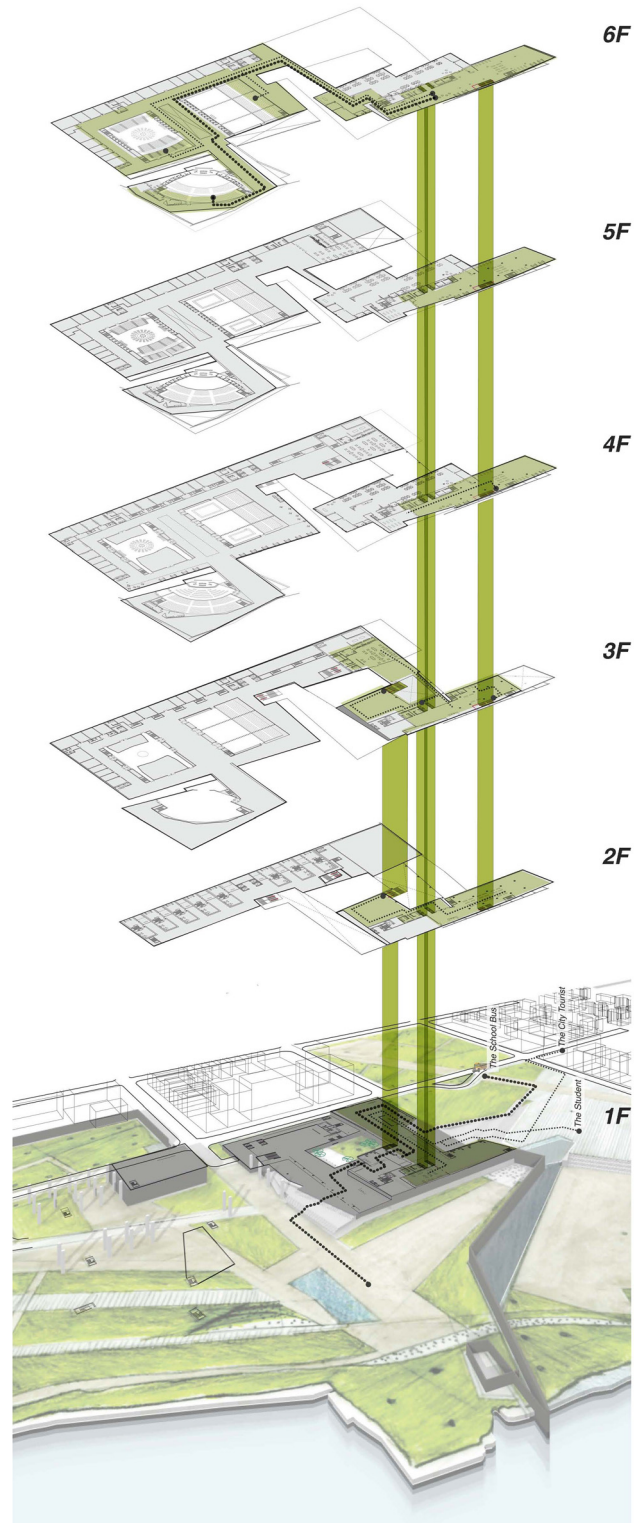


Figure 86 : Diagram showing proposed public vertical circulation and building sections with exclusive public access.

CIRCULATION_Staff

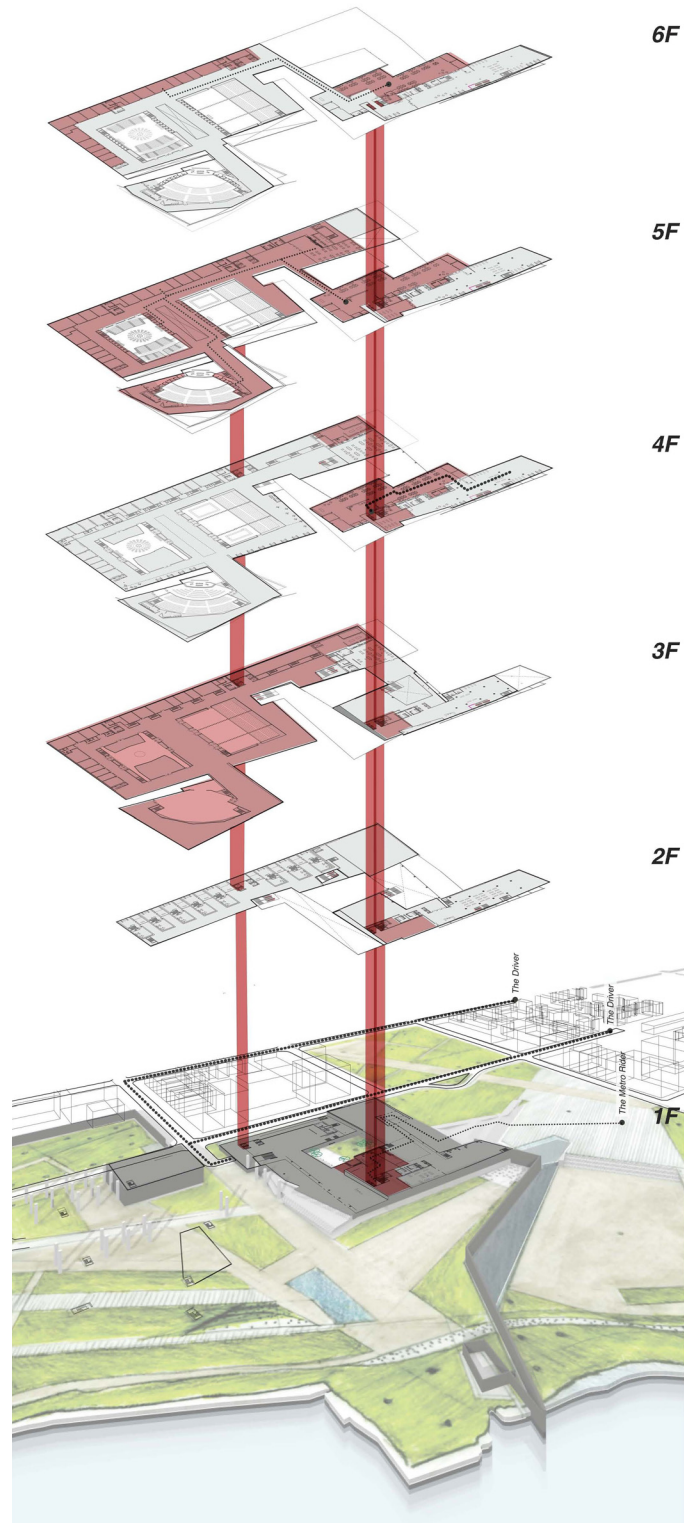


Figure 87 : Diagram showing proposed staff vertical circulation and building sections with exclusive UN staff access.

CIRCULATION_Delegates

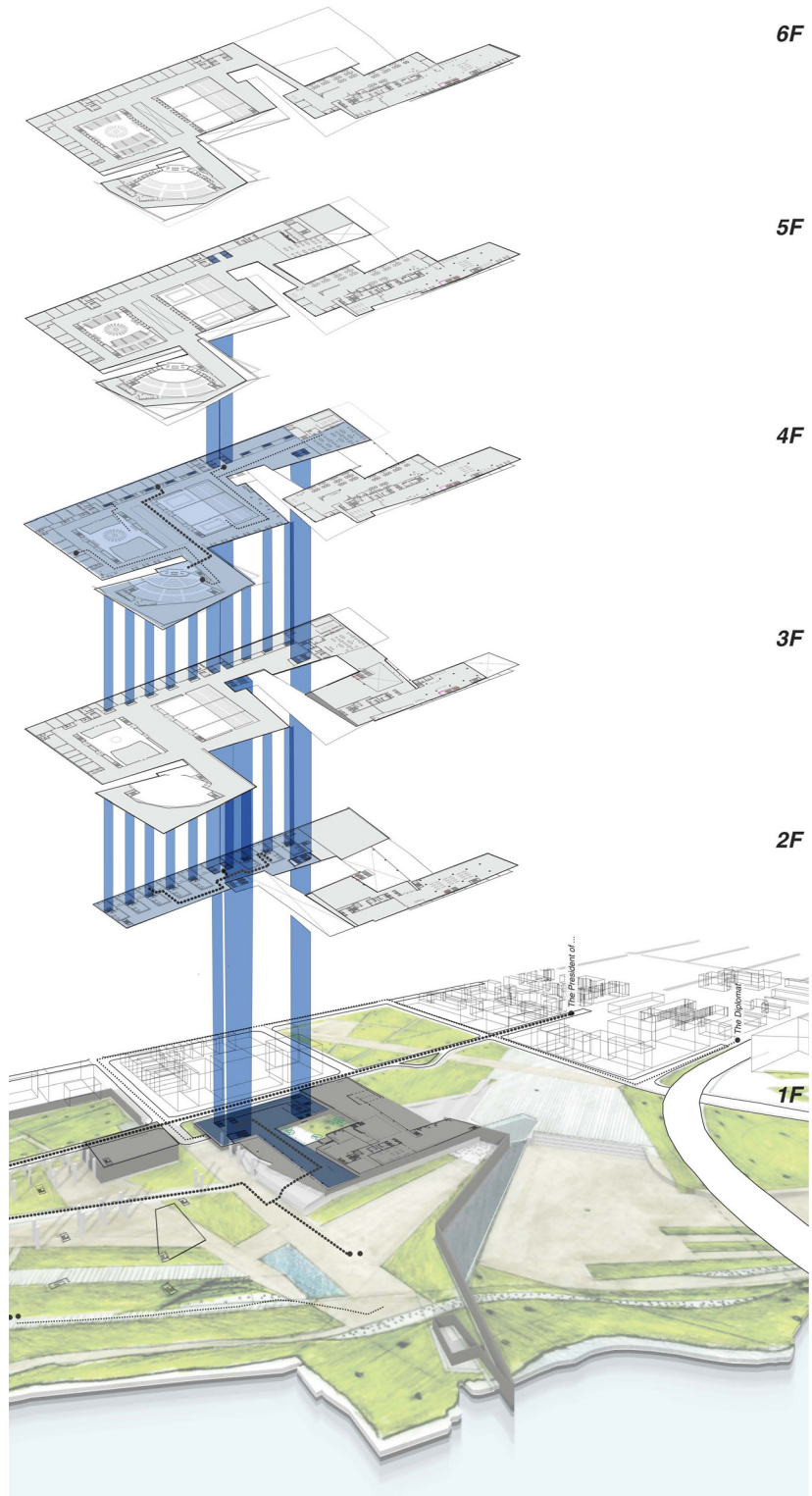


Figure 88 : Diagram showing proposed delegates and diplomat vertical circulation and building sections with exclusive delegate and diplomat access.

PROGRAM_Organization by User

■ PUBLIC
■ DELEGATES
■ STAFF

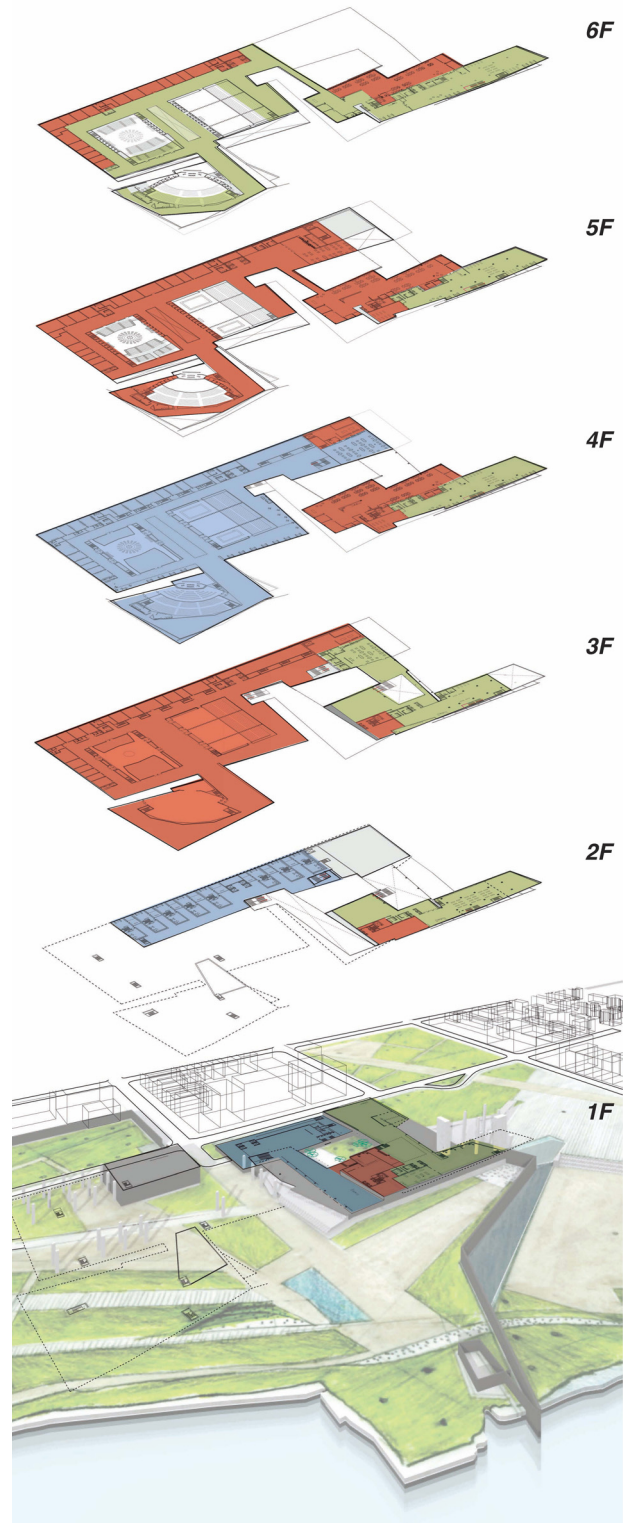


Figure 89 : Diagram explaining spaces organized by user. Colors show exclusive access to main program pieces by 3 major user types (public, staff and delegates).



Figure 90 : Proposed site plan, scale 1' 0" = 100' 0"

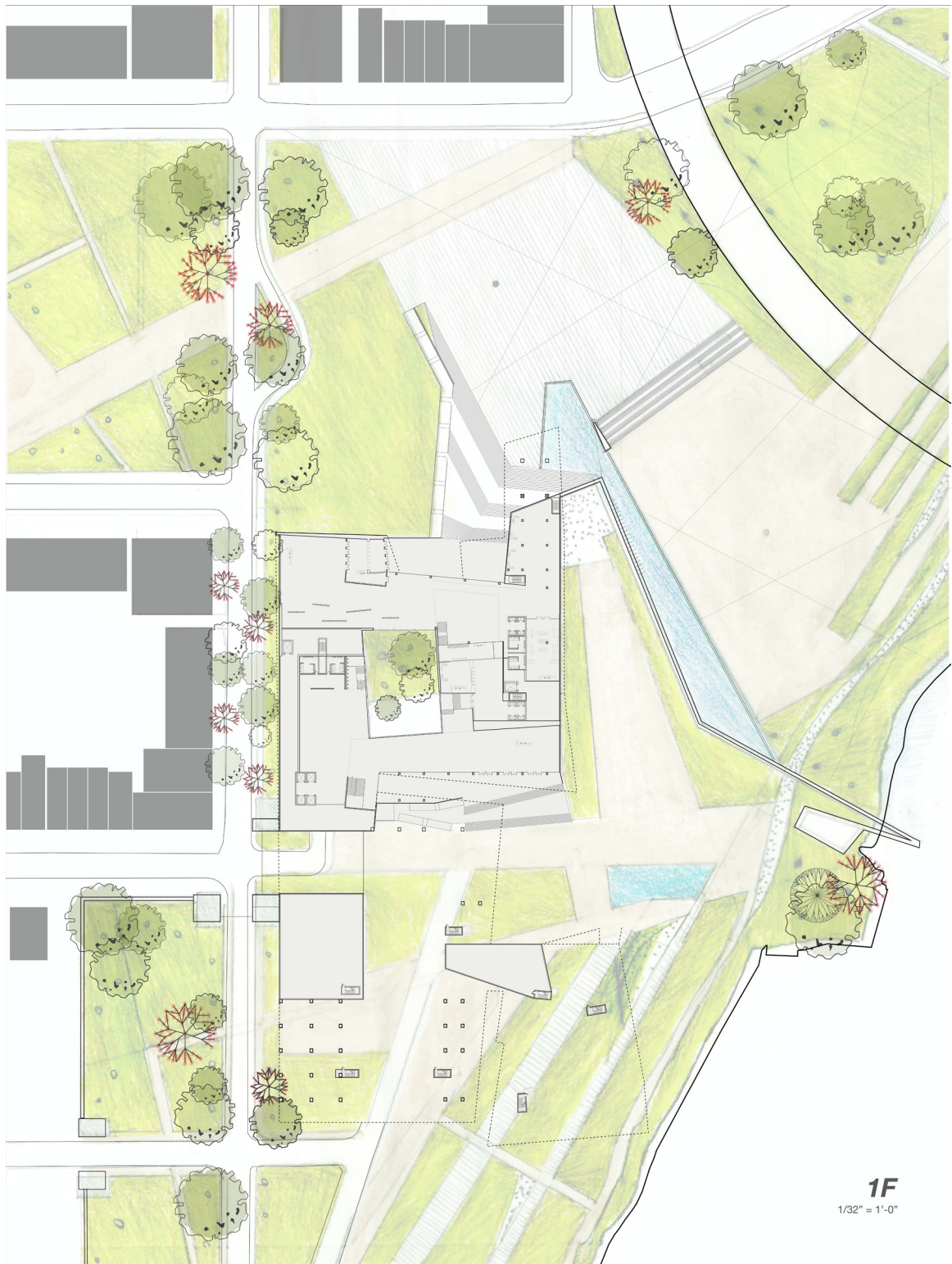


Figure 91 : First floor plan - Public, staff and delegate's lobbies, scale 1/32" = 1' 0"

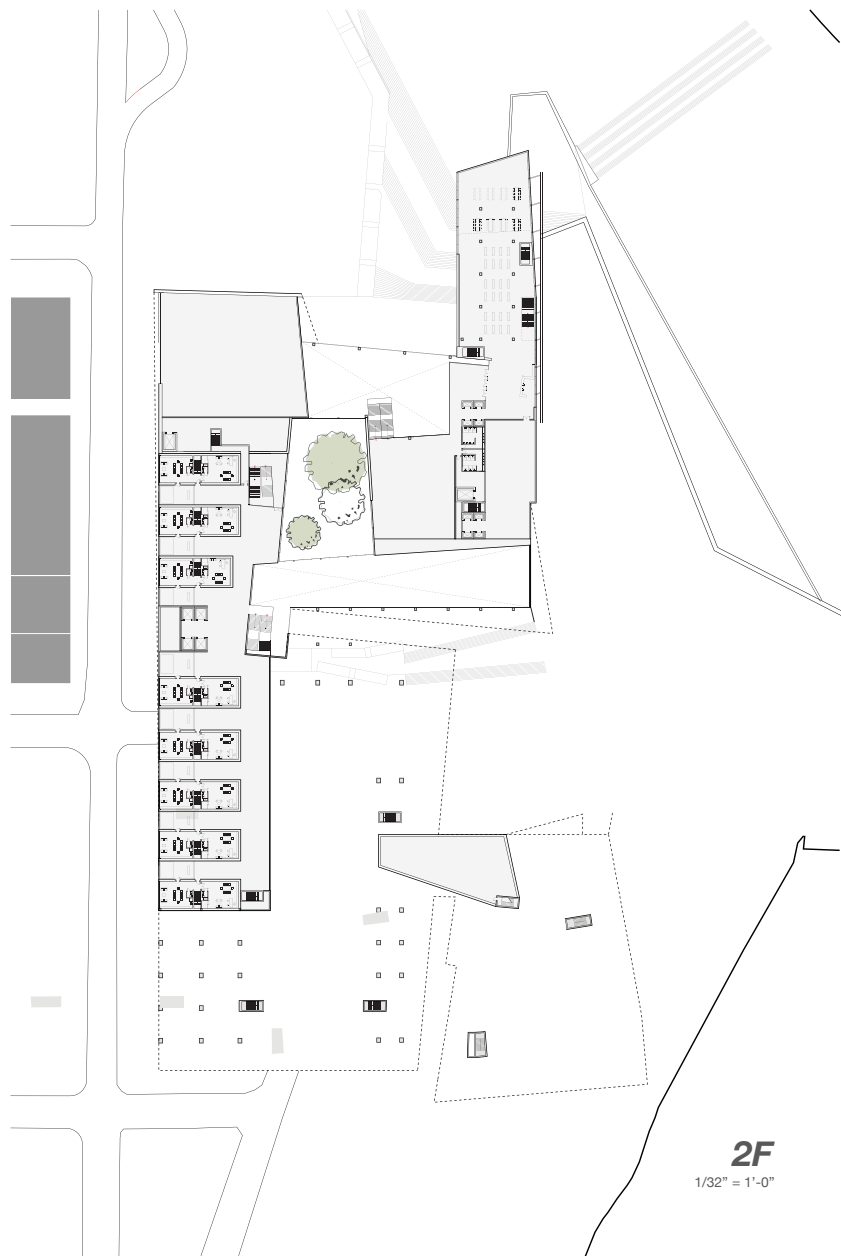


Figure 92 : Second floor plan - Diplomatic core, scale 1/32" = 1' 0"

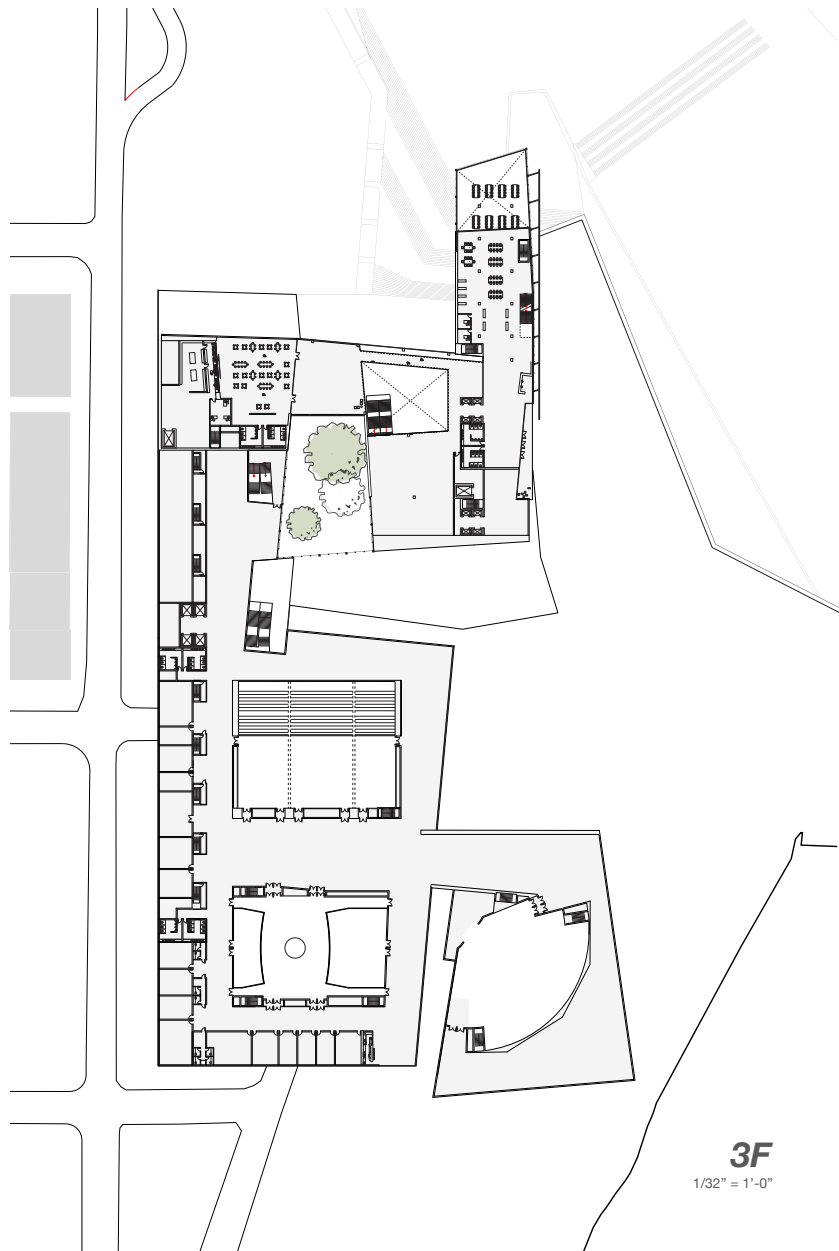


Figure 93 : Third floor plan - Conference Room support area, scale 1/32" = 1' 0"



Figure 94 : Fourth floor plan - Negotiation core, scale 1/32" = 1' 0"



Figure 95 : Fifth floor plan - Administration and translators floor, scale 1/32" = 1' 0"

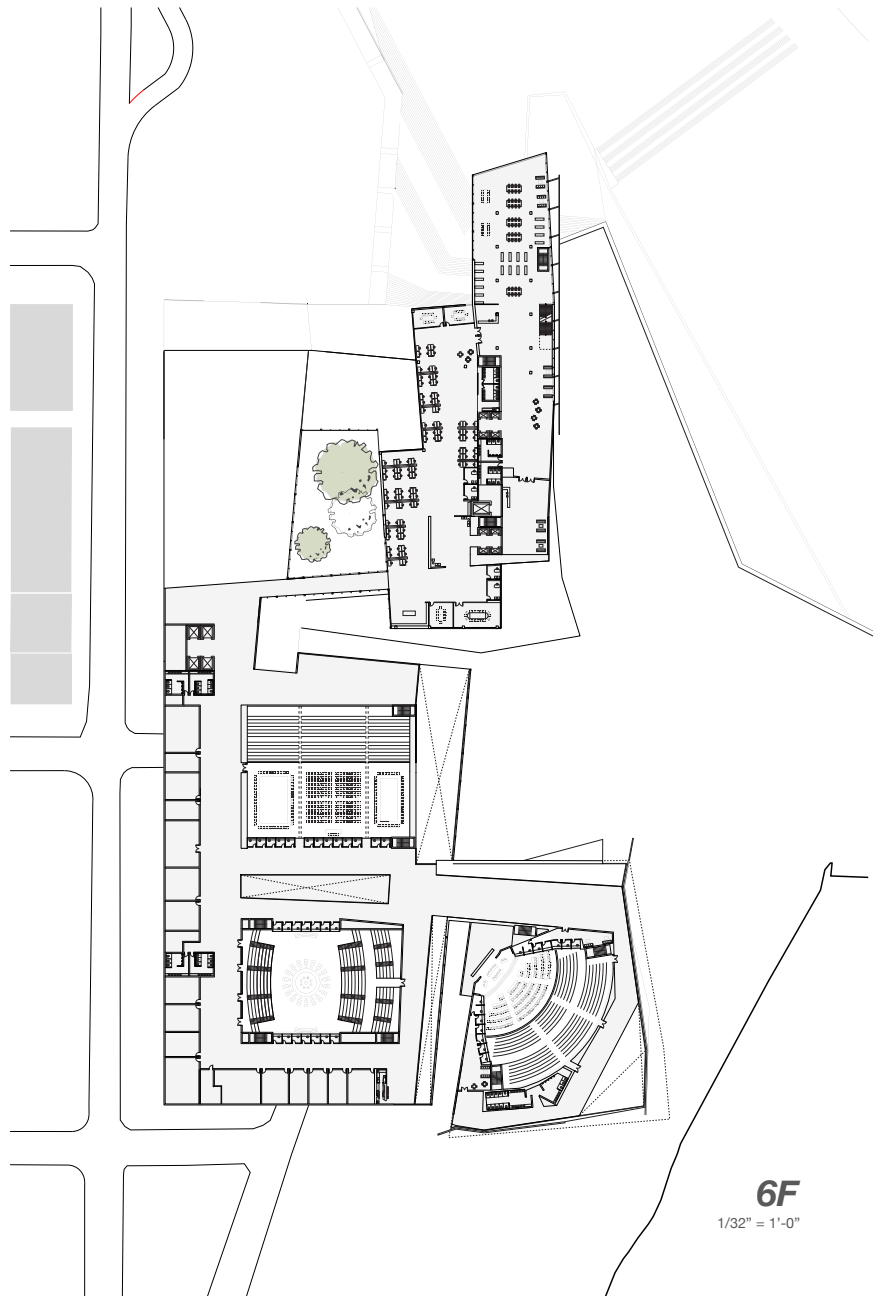


Figure 96 : Sixth floor plan - Administration floor, scale 1/32" = 1' 0"

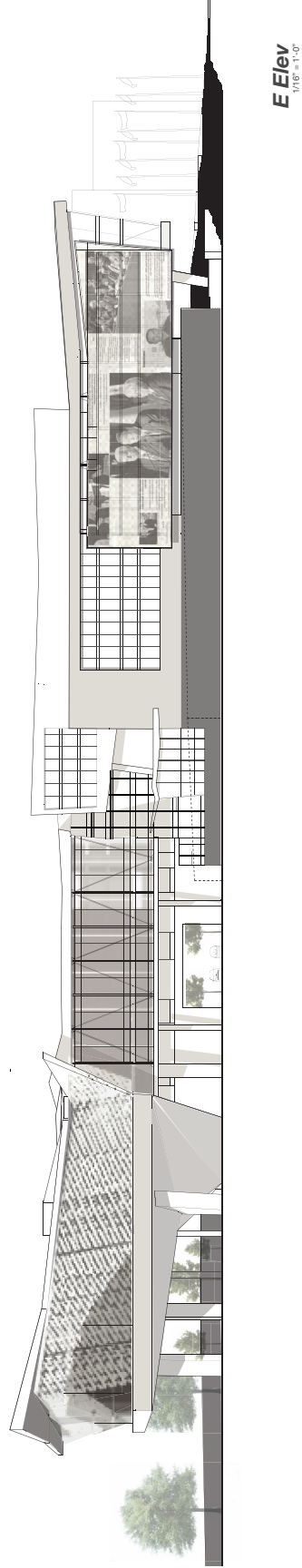


Figure 97 : East Elevation

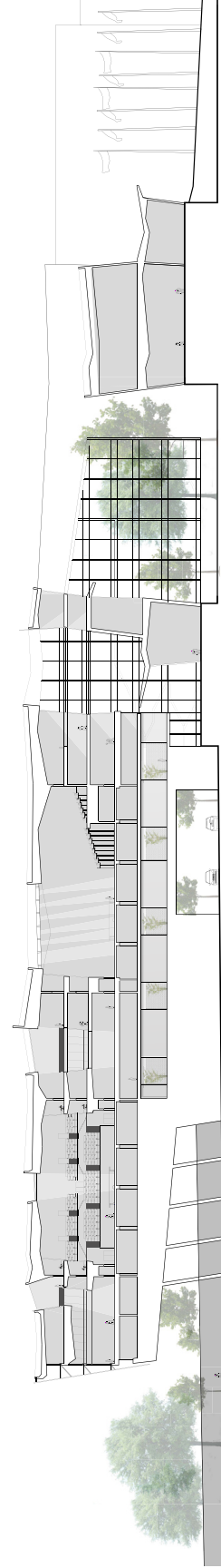


Figure 98 : Longitudinal section

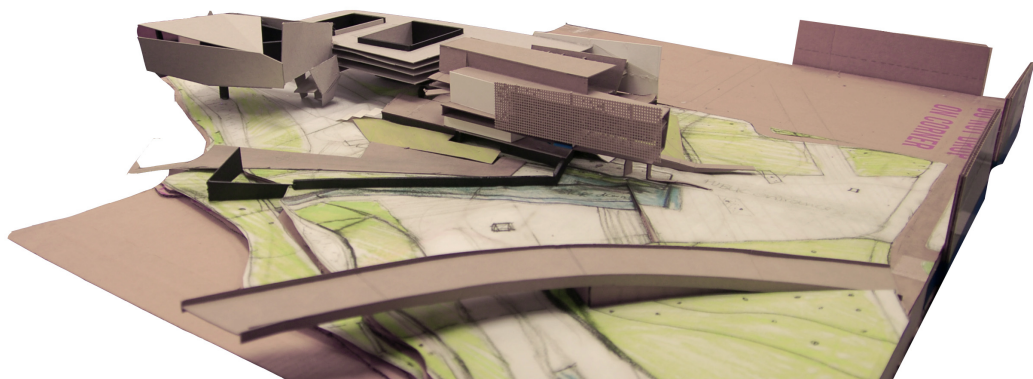
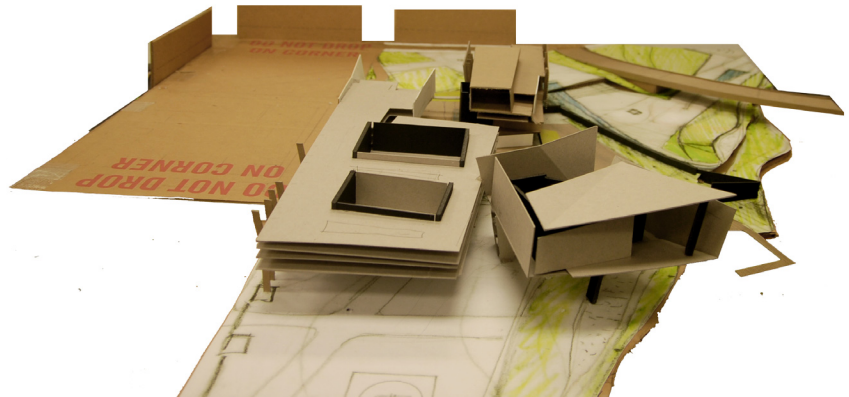
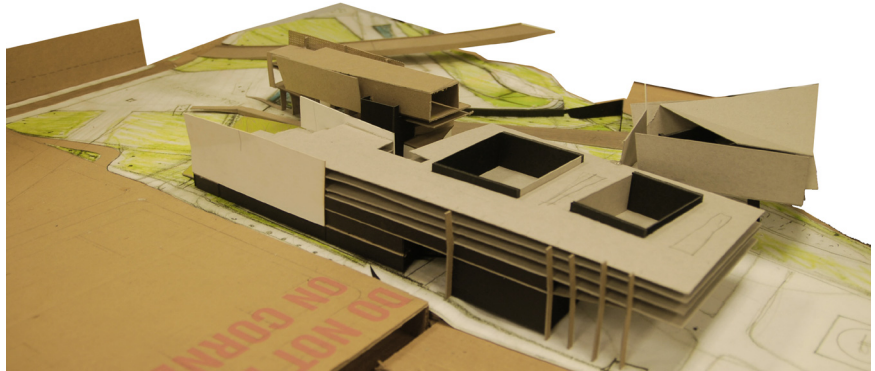
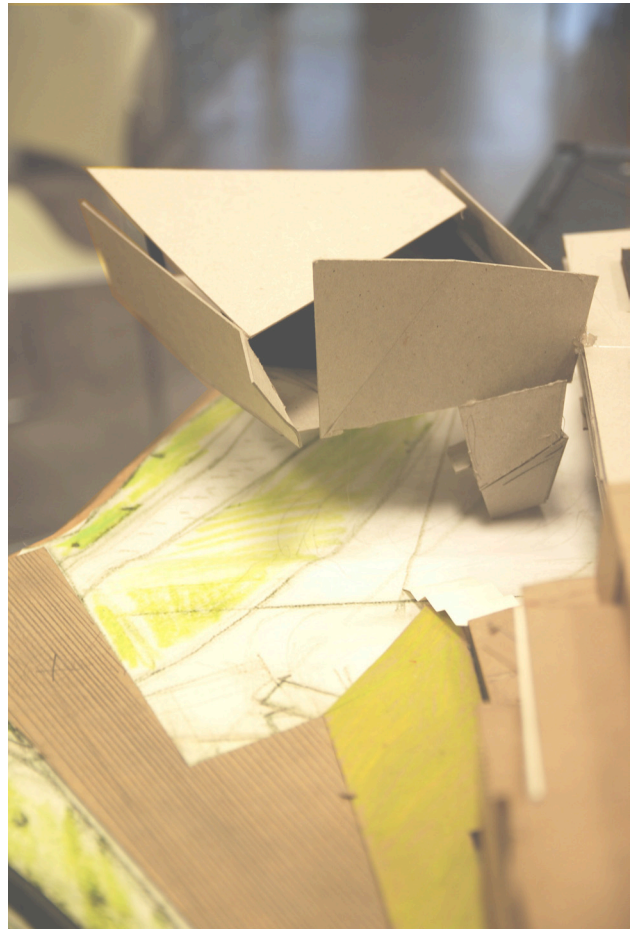


Figure 99 : 32nd scale study model showing major program pieces.

Figure 100 : Close up view of figural auditorium piece study and barrier separating public plaza from private UN gardens



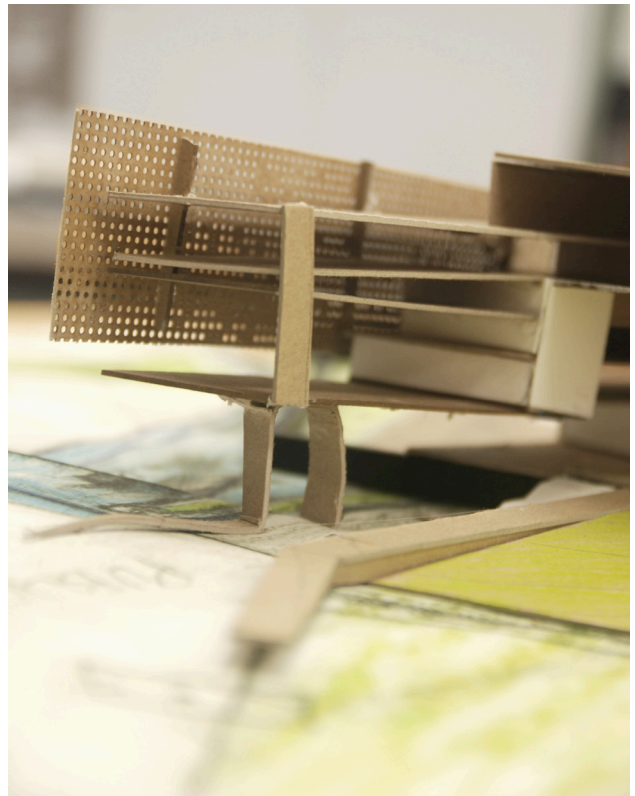


Figure 101 : Close up view of figural auditorium piece study, information screen and public plaza facing east screened facade.

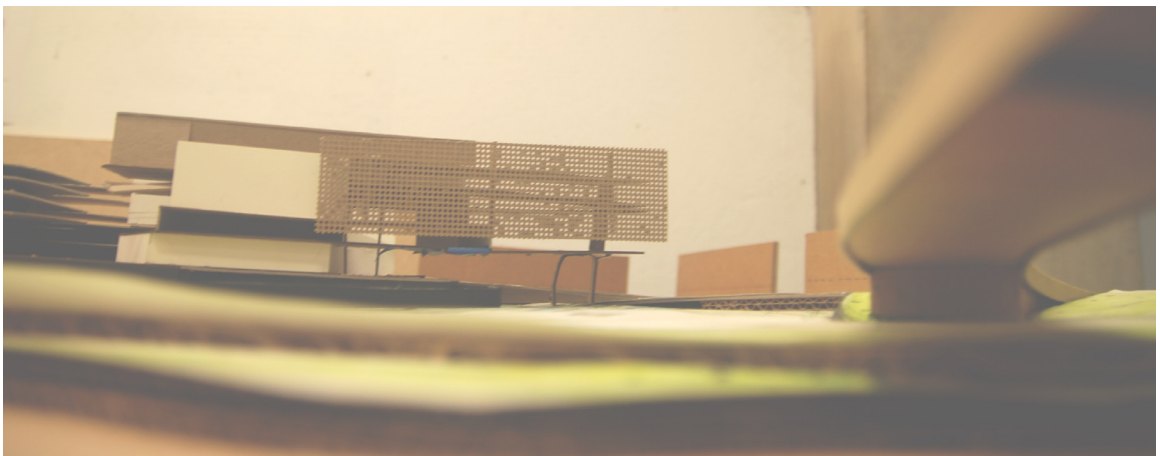


Figure 102 : Building entrance and front United Nations' plaza



Figure 103 : Public proposed park connecting with UN plaza and continuing the waterfront promenade

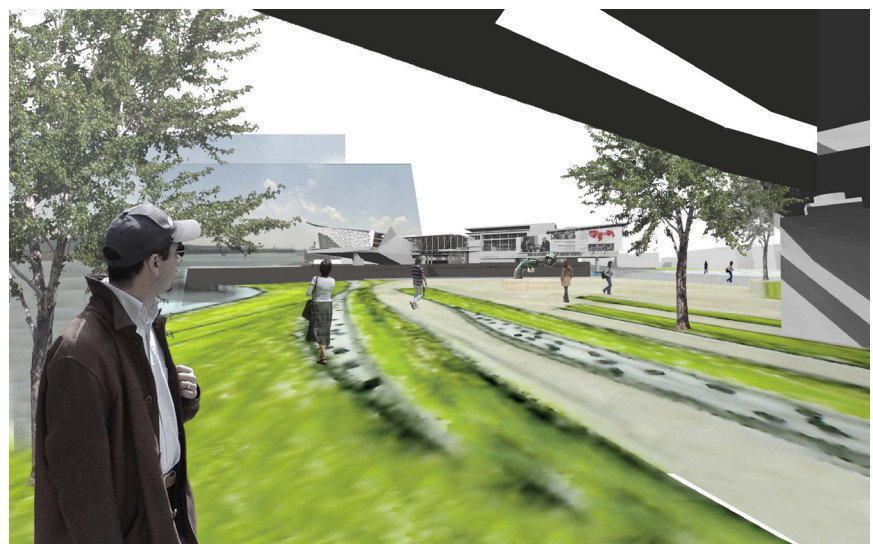




Figure 104 : From top to bottom_ Figural auditorium
 piece breaking rooms showing
 visual connections back to the
 Capitol Building, the Anacostia
 river and the School of War.
 Library interior with views back
 to the city.
 Public entrance atrium showing
 interior courtyard, and exhibition
 spaces.





Figure 105 : Close -up views of 16th scale model study of front step geometry as the embodiment of my idea of oppositions . The presence of at least two geometries and the fact that everyone has to share this steps represents are the architectural translation of the idea that often in negotiation the most direct path might not be the straight one but the long windy one.



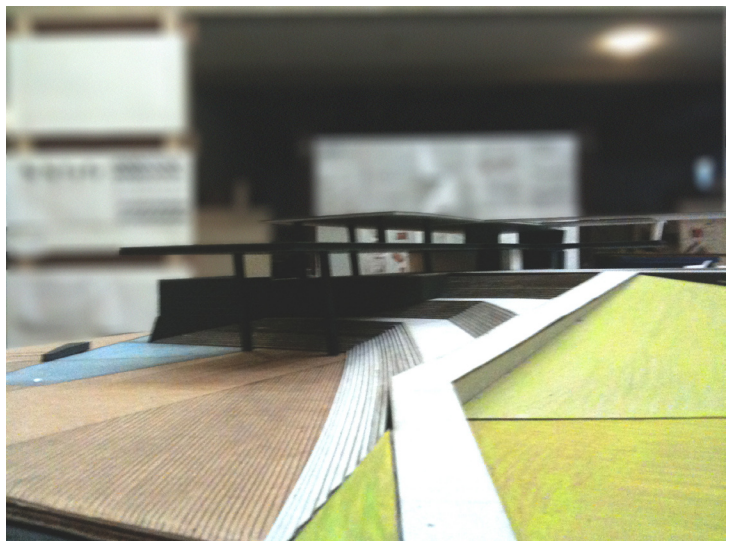
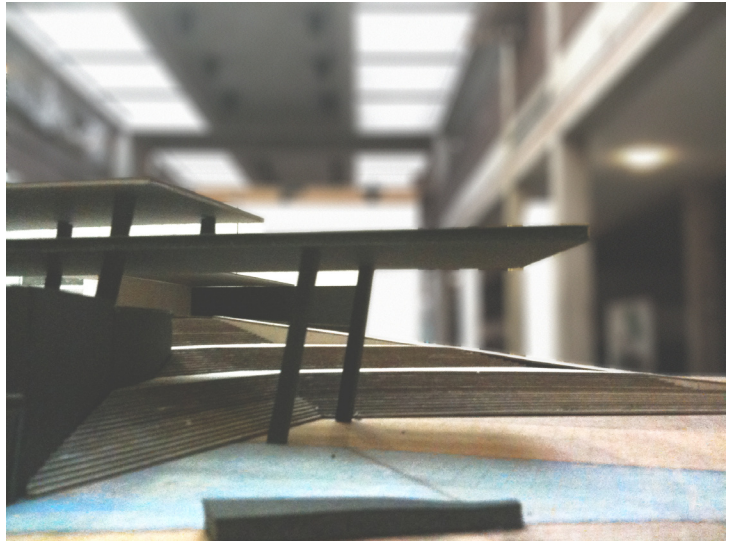


Figure 106 : Front steps and plaza 16th scale model studies.

Conclusions:

This thesis is the investigation of ideas of conflict negotiation viewed through the lens of collage. Analogous to the way collage negotiates juxtaposed materials under the same surface embracing their oppositional nature, this thesis acknowledges the existence of conflict and leans toward the curve of oppositions recognizing that the important aspect of this program is negotiation.

Oppositions between nations, countries, cultures, programmatic components, circulation patterns and perspectives are being collaged together to create the United Nations Building.

The applicability of collage, as a visual and conceptual artifact of oppositional conditions into multiple concepts, medias and design techniques (model, plan, elevation, section and perspective) has proven to be one of the more fruitful discoveries.

Equally important is the potential of collage for multiple readings that range from the physical to the philosophical. This multiplicity of readings will ultimately be visual and experiential but its success or failure depends almost exclusively in the ability to work, throughout the design process, simultaneously in different scales between model, plan, section, elevation and perspective; as well as in the ability to negotiate the “opposition” of its multiple lenses of inquiry, scales of engagement, ideas, images and forms. One of the many struggles in this research was the negotiation between the image of the institution as open and inviting, not only to all nations but to the public, and the issue of security at all different scales. Program pieces and circulation patterns that ranged from completely public such as the library and the exhibition spaces to completely private ones such as the diplomatic core had to be carefully choreographed to allow for the reading of both an inviting open institution with a strong public involvement and a secure one where delegates and diplomats comfortably and privately can engage in negotiation matters.

It is reasonable to deduce that the value of this research and its further applicability lies in the role of collage as a conceptual method of design that is consequently reflected in the architecturalization of negotiated opposing conditions and the visual aesthetic of the project. The geometry of the front steps of the building is the embodiment of my idea of oppositions; it has at least 2 different geometries and, as is the case with negotiation, the most direct path might not be the straight path but the windy indirect one.

Furthermore it is important to point out the significance of this proposal in relation to current discussions about the effects of globalization on culture and architecture and the increasing demand to design for different cultural environments. Global institutions, as is the case of the United Nations, as well as public institutions such as schools, libraries and museums, just to name a few, should respond to the multi-cultural nature of the majority of cities around the world.

Figure 107 : Night view showing piece rally awaiting for piece negotiations to come to an end.



I believe this approach is more global, not because it is melting cultures into a world culture, but because this approach allows me, and hopefully others, to understand the uniqueness of multiple cultures, and paradoxically/simultaneously the similarities/ universality of them.

Finally and equally central to the study is the realization of collage as more than a design technique but a state of mind, an attitude not only towards architecture but an attitude towards life.

Notes

1. Rowe, Collage city, xx.
2. Taylor, The Making of Modern Art, 87.
3. Taylor, The Making of Modern Art, 67.
4. Paraphrasing Taylor, The Making of Modern Art, 40.
5. Taylor quoting Haussman, The Making of Modern Art, xx.
6. Rowe, Collage city, 148.
7. Taylor, The Making of Modern Art, 13.
8. Tschumi and Cheng, State of Architecture at the Beginning of the 21st Century, 25.
9. Holgate, Aesthetics of Built Form, 120.
10. Rowe, Collage city, 148
11. Southwest Neighborhood Assembly, Inc. The Little Island: Foundations of a Community. http://www.swdc.org/neighborhood/about_sw_history.htm
12. Southwest Neighborhood Assembly, Inc. Changing Realities and Unmet Expectations: Climax and Decline. http://www.swdc.org/neighborhood/about_sw_history.htm
13. Southwest Neighborhood Assembly, Inc. Changing Realities and Unmet Expectations: Climax and Decline. http://www.swdc.org/neighborhood/about_sw_history.htm
14. Dudley, A Workshop for Peace, xii.
15. Dudley, A Workshop for Peace, xii.
16. Dudley, A Workshop for Peace, xii.
17. Dudley, A Workshop for Peace, xii.
18. Architectural Record, July 1952.
19. Summarizing UN Secretary General, program organization, 17.
20. Summarizing UN Secretary General, program organization, 19.
21. UN Secretary General, 21.
22. The UN Building, 17.
23. Summarizing UN Secretary General, circulation, 36.
24. Paraphrasing UN Secretary General, 36.

BIBLIOGRAPHY

Betsky, Aron. *The U.N. Building*. London: Thames and Hudson, 2005. Print

Cook, Peter. *The City, Seen as a Garden of Ideas*. New York, NY: Monacelli, 2003. Print.

Dudley, George A. *A Workshop for Peace: Designing the United Nations Headquarters*. New York, NY: Architectural History Foundation, 1994. Print.

Flanders, Steven, and Stephen G. Breyer. *Celebrating the Courthouse: a Guide for Architects, Their Clients, and the Public*. New York: W.W. Norton, 2006. Print.

Garbagna, Cristina. *Collage/collages: from Cubism to New Dada*. Milan: Electa, 2007. Print.

Holgate, Alan. *Aesthetics of Built Form*. Oxford: Oxford UP, 1992. Print.

"Neighborhood -- About Southwest History." *Welcome To Southwest and Near Southeast, Washington, DC*. Web. 16 May 2011. <http://www.swdc.org/neighborhood/about_sw_history.htm>.

Pasternak, Anne. *Creative Time, the Book: 33 Years of Public Art in New York City*. New York: Princeton Architectural, 2008. Print.

Rowe, Colin, and Fred Koetter. *Collage City*. Cambridge, MA: MIT, 1978. Print.

Taylor, Brandon. *Collage: the Making of Modern Art*. London: Thames & Hudson, 2004. Print.

Tschumi, Bernard, and Irene Cheng. *The State of Architecture at the Beginning of the 21st Century*. New York: Monacelli, 2003. Print.

"The Wharf - History of Southwest Waterfront." *The Wharf - Washington, DC*. Web. 16 May 2011. <<http://swdcwaterfront.com/about/waterfronthistory.htm>>.

U.N. Secretary General. *Report to the General Assembly of the United Nations by the Secretary-General on the Permanent Headquarters of the United Nations*. Lake Success, NY: United Nations, 1947. Print.

Yale School of Architecture. *Layered Urbanism*/ Gregg Pasquarelli, Galia Solomonof, Mario Gooden. New Haven, Connecticut: Yale School of Architecture, 2008. Paperback.